



Digitized by the Internet Archive
in 2014

<https://archive.org/details/b19974760M2986>

02 *CH*
THE CHEMIST AND DRUGGIST

DECEMBER 29, 1934

The
CHEMIST AND DRUGGIST

Established 1859

28 Essex Street, Strand, London, W.C.2

Registered as a Newspaper

No. 2864
VOL. CXXI.

DECEMBER 29, 1934

Annual Subscription (with
Diary) 20/- Single Copies 9d.

1935
Still greater Sales!

May the
forthcoming
year bring
you record
business

IS THE WISH OF THE PROPRIETORS OF



Wright's Coal Tar Soap

WRIGHT, LAYMAN & UMNEY
(1932) LIMITED



A complete range of dressings...

The range of Elastoplast Dressings covers practically every requirement likely to arise in modern dressing technique. It represents the outcome of years of experience and research brought up to date by one of the largest producers of surgical dressings in the World.

Order through your wholesaler or send for complete price list to the manufacturers:

British Made by

**T. J. SMITH & NEPHEW
LIMITED**

DEPT. C, HULL

LONDON · HULL · MANCHESTER · GLASGOW

THE RANGE CONSISTS OF:

Gauze and Plaster Dressing Strips in cartons. $1\frac{1}{2}$ ", $2\frac{1}{2}$ " and 3" widths x 1 yard.

Emergency Wound Dressings, sizes $1\frac{1}{2}$ " x $1\frac{1}{2}$ ", $1\frac{1}{2}$ " x 2", 2" x 3", $2\frac{1}{2}$ " x $3\frac{1}{2}$ ", $3\frac{1}{2}$ " x $4\frac{1}{2}$ ". In envelopes.

Boil Dressings (ready for use) in cartons containing three or five dressings.

Finger Dressings, neatly packed in cartons.

Eye Dressings for right and left eye. In envelopes.

Vaccination Dressings in adult, child and infant sizes. In envelopes.

Belladonna, Wintergreen and Capsicum Porous Plasters. In envelopes. All standard sizes.



Elastoplast

MANUFACTURERS OF PARAGON
BRAND SURGICAL DRESSINGS

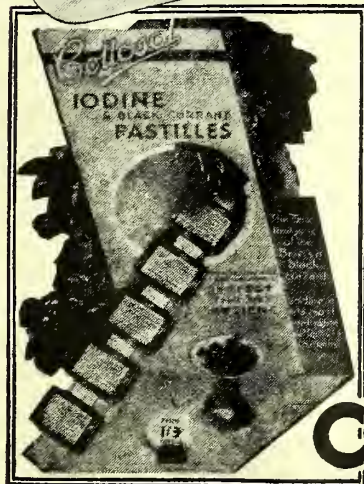
A QUICK SELLING LINE



A product which sells itself on its own merits and shows a margin of profit varying from 72 per cent. to 91 per cent. on outlay when advantage is taken of the generous bonus terms offered.

Two displays are available this year, both of which are of unique and compelling design, the larger being featured inset.

Do not be caught this winter without sufficient stocks.



CROOKES'
COLLOSOL (Reg'd)

IODINE & BLACK CURRANT PASTILLES

THE CROOKES LABORATORIES (British Colloids, Ltd.)
PARK ROYAL, LONDON, N.W. 10

Telephone: Willesden 6313 (3 lines). Telegrams: Collosols, Harles, London

GIVING 91% PROFIT ON OUTLAY

Kemball, Bishop

& CO. LIMITED

CROWN CHEMICAL WORKS, THREE MILL LANE,
BROMLEY-BY-BOW, LONDON, E.3

Telephone:
ADVance 1234
(5 lines)

Codes: A. B. C. 6th
Bentley's & Private

Telegrams:
Kemball, London

Manufacturers of

**CITRIC ACID
TARTARIC ACID
CREAM OF TARTAR
ROCHELLE SALTS
LITHIUM CARBONATE
& HYDROXIDE
Quality Guaranteed**

*Established
1870*



HYPO

"CURLEW"

BRAND

PHOTOGRAPHIC HYPO
is of outstanding purity
and unvarying quality

Enquiries should be addressed to

**IMPERIAL CHEMICAL
INDUSTRIES LIMITED**

ROOM 170J

IMPERIAL CHEMICAL HOUSE, LONDON, S.W.1

C.N.190



CREAM OF MAGNESIA

Cream of Magnesia (*Mistura Magnesii Hydroxidi B.P., U.S.P.X.*) Pattinson's Brand consists of Magnesium Hydroxide in a state of almost perfect suspension in pure water. It is prepared by an improved and patented process that ensures an absolutely pure product of regular composition, whilst viscosity can be varied to suit customers' requirements. In addition to its virtues as an antacid, Pattinson's Brand Cream of Magnesia can be used as a mild laxative; it also makes an excellent mouth wash and liquid dentifrice. It is supplied in carboys and

in one gallon bottles. A 12 oz. sample bottle will be sent free, on request.



THE WASHINGTON CHEMICAL CO
BRANCH OF TURNER AND NEWALL LIMITED

Washington Station, Co. Durham. Telephone: Low Fell 76035. Telegrams: "Chemical Washington Station."

INDEX TO ADVERTISERS

Acton Pill & Tablet Co., Ltd. (Uricure Tablets)	20	British Drug Houses, Ltd., The (Radio-Malt)	24	Hackett, S. E. (Film Overstocks)	Col. Supp.
Aerograph Co., Ltd. (DeVilbiss Sprays)	viii	Burrough, James, Ltd. (Alcohol)	Leader Page	Halmagon Brand Tablets	iv
Allen, Stafford, & Sons, Ltd. (Extracts, Tinctures, &c.)	9	Burroughs Wellcome & Co. (Kepler C.L.O. with Malt Extract)	23	Hamnden Residential Club	Col. Supp.
Anglo-French Drug Co., Ltd. (Anakinthine Nasal Drops)	vi	Butler & Crispe (Service)	13	Hancock, James Lyne, Ltd. (Hot Water Bottles)	18
Arnfield, J. C., & Sons, Ltd. (Raspberry Vinegar, &c.)	ii	Christy, T., & Co., Ltd. (Co-re-ga) ...	20	Harrison, A., & Sons, Ltd. (Printing)...	21
Aspro, Ltd. (Aspro)	xiv	Clark, Cicero S. (Cachets)	20	Harvey & Co. (Dublin), Ltd. (Veterinary)	xiii
Association of Manfg. Chemists, Ltd. Col. Supp.		Clark, S. F. (Valuer, &c.)	Col. Supp.	Hirst, Brooke & Hirst, Ltd. (Jocks Pastilles)	iv
Barnett, Jack L., Ltd. (Bottles)	20	Cockburn & Co., Ltd. ("Little Victor" Inhaler)	x	Hobson, J., & Sons, Ltd. ('Vintegg' Egg Wine)	20
Beechams Pills, Ltd. (Beecham Products)	v	Cox, A. H., & Co., Ltd. (Pills and Tablets)	Cover	Hough, Hoseason & Co., Ltd. (Nalgo Antiseptic)	5
Bell, John, Hills & Lucas, Ltd. (Cold Cure Capsules)	Leader Page	Crookes Laboratories (Iodine and Blackcurrant Pastilles)	1	Imperial Chemical Industries, Ltd. (Hypo)	3
Berdoe & Fish, Ltd. (Valuers, &c.) Col. Supp.		Dols Volatalise Flannel, Ltd.	20	Johns, Son & Watts, Ltd. (Cartons and Boxes)	19
Betts & Co., Ltd. (Collapsible Tubes) ..	21	Dudley & Co., Ltd. (Counter Cases) ...	18	Josephs, Philip, & Sons, Ltd. (Shop-fittings)	Col. Supp.
Blackie, R. (Cataplasma Kaolin)	vii	English Grains Co., Ltd. (Yestamin)...	20	Kemball, Bishop & Co., Ltd. (Chemicals)	2
Bleasdale, Ltd. (Sapo Mollis Virid B.P.)	iv	Eucryl, Ltd. (Dentifrices)	8	Lawrence, G. H., Ltd. (Razor Blades) ..	8
Blythe, W., & Co., Ltd. (Chemicals) ...	iii	Gardner, W., & Sons (Glos.), Ltd. (Machinery)	xii	Lax & Shaw, Ltd. (Bottles)	16
Booth, J., & Son (Machinery)	xii	George, Ernest J., & Co. (Valuer, &c.) Col. Supp.		Liverpool School of Pharmacy	xiii
Brierley, John (Valuer, &c.)	Col. Supp.	Gibbs, Antony, & Sons (Iodine)	vi		
British Diamalt Co. (Malt and Oil)....	viii	Grout & Co., Ltd. (Crêpe Bandages, &c.)	17		
		Guest, T., & Co., Ltd. (Glycerine of Thymol Pastilles)	7		

AN EVER WIDENING CIRCLE...



The fact that the medical and dental professions regularly use this new and unique antiseptic in their own surgeries as well as recommend it to their patients, is a sure indication of its worth. Skilful propaganda steadily maintained means definite enquiries for

NALGO

THE ANTISEPTIC

It merits your attention and recommendation because it is absolutely safe—definitely kills pain—stops swellings and quickly subdues inflammation. There is a good margin of profit and you can obtain direct or from your usual wholesaler.

Packed in two sizes, 10½d. or 1/6

If you would like interesting literature we invite your enquiries for

TAB. ARTHRITONE — for Rheumatoid Arthritis and allied Rheumatic conditions.

Gives results where other methods of treatment have failed.

Price ...	100	250	500	1,000
	4½d.	8½d.	16/-	30/-

TAB. CHELIDON CO. — for Gall Stones.

Excellent results in Gall stones, affording endless opportunity to enterprising Chemists.

Price, in bulk, 32/- per 1,000 nett.

HOUGH, HOSEASON & CO., LTD.

TRADE AND EXPORT
ENQUIRIES INVITED

Manufacturing Chemists, MANCHESTER 3

[Continued overleaf.]

INDEX—cont.

Locker, T., & Co., Ltd. (Wire Screws, &c.)	20	Pearson, James, Ltd. (Xodo Iodised Locket)	22	Spencer, Isaac, & Co. (Aberdeen), Ltd. (Cod Liver Oil)	ix
London & Provincial Factors, Ltd. (Wanie Blades)	17	Perox, Ltd. (Quincasca Tablets)	x	Starke, R. W. B. (Camomile Oil)	20
Low, Son & Haydon, Ltd. (Toilet Preps.)	20	Porteus, G., & Sons (Leeds), Ltd. (Machinery)	xii	Sterns, Ltd. (Oils, Petroleum)	x
McGlashan, D., Ltd. (Abdine)	20	Potter & Clarke, Ltd. (Wholesale Druggists)	11	Summer's Typhoo Tea, Ltd.	Leader Page
Mandall & Co., Ltd. (Licoricine)	iv	Prescriber, The	Leader Page	Tenz, Ltd. (Deodorant Tablets)	20
Martindale, W. ("E.S.T.P.")	iii	Proprietary Agencies, Ltd. ("California Syrup of Figs")	7	Thornton & Ross, Ltd. (Olive Oil)	vii
Mather, William, Ltd. (Plaisters, &c.)	18	Rendell, W. J., Ltd. (Quinine Presaries)	12	Thurley, G. E., & Son (Liquid Paraffin)	vi
Matthews, D., & Son (Shopfittings)	xii	Rudolph-Riddell, F. O. (Bronchovydrin)	6	Toogood, Wm., Ltd. (Soapless Shampoos)	8
Maund, F., & Berg, E., Ltd. (Showcases)	20, Col. Supp.	Scintillating Sign Service (Illuminated Signs, &c.)	xii	Town Talk Polish Co. (Liquid Silver Polish)	xiii
Mawdsley, D., & Co. (Malt and Cod Liver Oil)	Leader Page	Scott & Bowne, Ltd. (William's Shaving Preparations)	20	Tyrer, T., & Co., Ltd. (Sterling Brand Chemicals)	ii
Meggeson & Co., Ltd. (Pastilles)	i	Scurr, C. A. (Optical Tuition)	Leader Page	United Glass Bottle Manufacturers, Ltd. (Medical Bottles)	15
Mono Containers, Ltd. (Hygienic Containers)	19	Shadcine Co. (Hair Dyes)	20	Wagner, R. V. (Bottle Caps)	xi
Mundet Cork Products, Ltd. (Corks and Stoppers)	Leader Page	Sherley, A. F., & Co., Ltd. (Veterinary Preparations)	xiii	Ward, T., & Sons, Ltd. (Wardonia Razor)	17
Mysore, Trade Commissioner for, in London (Sandalwood Oil)	14	Smith, T. & H., Ltd. (Alkaloids)	ii	Washington Chemical Co., Ltd. (Cream of Magnesia)	4
Newball & Mason, Ltd. (Ginger Wine Essence)	x	Smith, T. J., & Nephew, Ltd. (Elastoplast Dressings)	Cover	Watts, T., & Walker, Ltd. (Valuers, &c.)	Col. Supp.
Norwegian Cod Liver Oil	ix	Solazzi Liqueur	iii	Whiffen & Sons, Ltd. (Iodides, &c.)	Cover
Olley, C., & Sons, Ltd. (Corks)	xi	Solport Bros., Ltd. (Hot Water Bottle Covers)	17	Wood Bros. Glass Co., Ltd. (Glassware)	xi
Orridge & Co. (Valuers, &c.)	Col. Supp.	Southall Bros. & Barelay, Ltd. (Sanitary Towels)	18	Wright, Layman & Umney (1932), Ltd. (Coal Tar Soap)	Cover
Parkinsons, Ltd. (Pills)	10	Speake, W. (Old Bottle Stocks)	Col. Supp.	Zeal, G. H., Ltd. (Clinical Thermometers)	18
Pearson & Co. (Chesterfield), Ltd. (Stoneware Containers)	xi				

for **ASTHMA**
BRONCHOVYDRIN

Bronchovydrin Inhalers
7/9 & 18/-

SAMPLE & LITERATURE FROM
FRANCIS O RUDLOPH-RIDDELL

Dept. C.D.
SENTINEL HOUSE, Southampton Row, W.C.1.
Telephone HOLBORN 9200

Increase your Profits

TAKE ADVANTAGE OF COMBINED QUANTITY DISCOUNTS

ON

"CALIFORNIA SYRUP OF FIGS" (REGD.)

Brand
Laxative

★ PHILLIPS' DENTAL MAGNESIA

★ "MILK OF MAGNESIA" (REGD.)

★ MILK OF MAGNESIA Brand TABLETS

★ "DANDERINE" (REGD.)

ON ORDERS VALUE **£6** COMPRISED

EXCLUSIVELY OF ITEMS MARKED ★

WE WILL CONTINUE TO ALLOW

12½% CASH 30 DAYS.**£3**Assortment of goods.
Through your whole-
saler only.**5%**

Cash 30 Days

£6

Assortment of goods

7½%

Cash 30 Days

All discounts are conditional upon 14 days display of goods.

PROPRIETARY AGENCIES LTD.

179/181 ACTON VALE, W.3.

Phone : SHEPHERDS BUSH, 4435.

A "SURE SHIELD" PRODUCT—

GLYCERINE OF THYMOL PASTILLES

8½^{D.} and 1/3 Tins

THE STANDARD SALINE PASTILLE
FOR THE MOUTH AND GUMS

OF RECOGNISED MERIT AND
POPULARITY

STOCKED BY ALL WHOLESALE HOUSES

LONDON DEPOT:

15-16 Jewry Street, E.C.3.

Telephone : Royal 8111.

THOS. GUEST & Co., Ltd.

Carruthers Street,

ANCOATS, MANCHESTER, 4



TOOGOOD'S SOAPLESS SHAMPOO Powders



In Envelopes

Boxes of 3 dozen, 24/- per gross



In Compressed Tablets
Show Boxes of 1 dozen
24/- per dozen Boxes

Manufactured by
WILLIAM TOOGOOD LTD.
77 SOUTHWARK ST., LONDON, S.E.1

EUCRYL

DENTIFRICES

TOOTH POWDER TOOTH PASTE

DENTURE POWDER

Bought on Display Terms yield

PROFIT ON
SELLING PRICE

43%

PROFIT ON
BUYING PRICE

75%

BRITISH OWNED

BRITISH MADE



EUCRYL LTD. Manufacturing Chemists-SOUTHAMPTON

"LAURELS" for LADIES & GENTS

"LAUREL" REGD.
LADIES BOUDOIR
SAFETY RAZOR

Complete Outfit 6d.
Blades retail at 1½d. each
Packet of 4 for 6d.



THE
NEW IMPROVED
"LAUREL"
REGD.
DUMB-BELL
SAFETY
RAZOR

Complete Outfit 6d.
Blades 1½d. each
Packet of 4 for 6d.

ARE YOU READY TO SUPPLY? ORDER YOUR STOCK TO-DAY

Geo. H. Lawrence, Ltd., Laurel Works,
Nursery Street, SHEFFIELD

(17)

Famous Figures



HENRY CAVENDISH

Henry Cavendish (1731-1810) was one of the most creative workers and distinguished characters in the history of chemistry. The scion of a noble family and one of the richest Englishmen of his day, he led a very long ascetic life, consecrated with martyr-like devotion to the cause of natural philosophy.

A man remarkable for his taciturnity, who wrote a great deal but spoke and published very little. Remarkable also for the diligence with which he pursued his investigations and in the degree of accuracy which characterised his experimental results. Cavendish, when we consider the imperfection of the instruments at his disposal, as a physical chemist has had no equal.

The accuracy of many of his calculations, his figures for the composition of the atmosphere, for example, have been verified by subsequent scientists using the most modern apparatus. One of his most notable achievements was the discovery of hydrogen, which he called "inflammable air." He studied its properties carefully. His greatest triumph, however, was the discovery of the composition of water. It is difficult to-day to appreciate the revolutionary nature of this conception, but the knowledge that a substance from time immemorial regarded as an "element," was constituted of two gases, hydrogen and oxygen, began a new era in chemistry.

Cavendish lived in London, where he had two houses, one in Bloomsbury and one on Clapham Common. Rooms were converted into workshops and laboratories and he was almost their prisoner for long periods. Of an extremely shy

In Pharmacy AND ITS ALLIED FIELDS

and retiring nature he rarely attended public functions, and on one occasion fled in terror from a gathering of celebrities when suddenly hailed by a foreigner as the "renowned Cavendish." He invariably dined on a leg of mutton.

Cavendish might be called the great "measurer." It was the quantitative aspect of things that interested him. As Wilson says, "he weighed the earth, he analysed the air, he discovered the compound nature of water, he noted with numerical precision the obscure actions of the ancient element fire."

STAFFALLENS

EXTRACTS TINCTURES
POWDERS
ETC., ETC.

THE APPLICATION OF SCIENTIFIC PRINCIPLES IN THE PRODUCTION OF STAFFALLENS PREPARATIONS IS ENSURED THROUGH SPECIALLY EQUIPPED LABORATORIES AND A HIGHLY TRAINED TECHNICAL STAFF.

WHOLESALE TRADE ONLY

Above we reproduce the only known portrait of Cavendish, and this was obtained by the artist first sketching in the hat and the coat, and as an opportunity presented itself, the profile, since our subject strongly opposed having his likeness reproduced at all.

**STAFFORD ALLEN
& SONS LTD.**
MANUFACTURING CHEMISTS
COWPER STREET, LONDON,
E.C.2.
100 Years of Service Established 1833



PILLS

(SUGAR COATED) BLOOD & STOMACH, HEAD & STOMACH, BACK & KIDNEY, LAXATIVE, LIVER, ETC.

RETAIL 1D, 3D, 6D & 1/-



KILKOF Regd. TACKLES THAT TICKLE

FOR COUGHS, COLDS, BRONCHITIS, CATARRH, ASTHMA, SORE THROAT, ETC.

RETAIL 1/3 & 3/-



E·Z·POWDERS Regd.

FOR HEADACHE, NEURALGIA, INFLUENZA, RHEUMATISM, ETC.

RETAIL 1/3 & 3/-

PARKINSONS

MANUFACTURING CHEMISTS

BURNLEY



POTTER'S CATARRH PASTILLES



P. A. T. A. 1s. 3d.
PER DOZ. 11s. 0d.
BOXES $\frac{1}{2}$ DOZ.

*Advertising is continuous and
carried on throughout the year*

'Phone :
Bishopsgate
4761
(5 lines)

'Grams :
"Horsehound"
Phone
London"
(2 words)

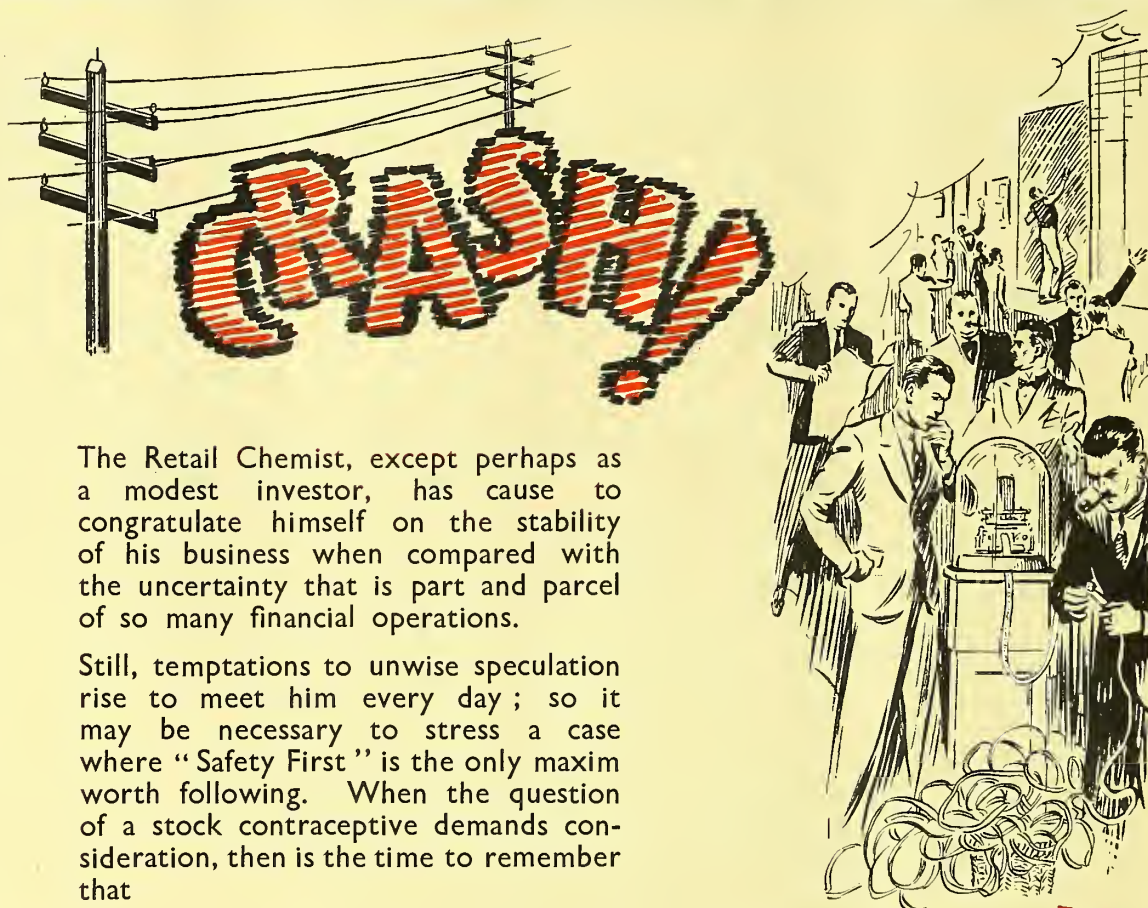
LOOK TO YOUR STOCKS

POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.1

Manchester: 77 Dantzic Street.





The Retail Chemist, except perhaps as a modest investor, has cause to congratulate himself on the stability of his business when compared with the uncertainty that is part and parcel of so many financial operations.

Still, temptations to unwise speculation rise to meet him every day; so it may be necessary to stress a case where "Safety First" is the only maxim worth following. When the question of a stock contraceptive demands consideration, then is the time to remember that

RENDELL'S

PESSARIES

have for 50 years had no rival in public and medical approval

CHEMISTS— Consider the facts

Rendell's, recommended by users and doctors, are known to be safe, efficacious and satisfactory, and customers asking for them will accept nothing else. Rendell's have proved to be the strongest bond between individual chemists and their customers. They are backed by sound advertising support. Write for details.

*As Trustee of
the Public Safety
let your stock
be RENDELL'S!*

W. J. RENDELL LTD.
HARDWICK HOUSE,
161-165, ROSEBERY AVENUE, LONDON, E.C.1.



Butler & Crispe offer Chemists

a service of unequalled value for the promptest delivery of all orders to any distance by the quickest route. Town deliveries by motor, provincial also by motor over a wide area. Rail orders despatched same day as received. British, French and American Medicines, Toilet Goods and Perfumery. Fine Chemicals. Druggists' Sundries. Photographic Goods.

TELEGRAMS:
"Allwant, Smith, London."
CABLES AND MARCONIGRAMS:
"Allwant, London."
TELEPHONE:
Clerkenwell 2661 (private exchange).

Established 1777.

BUTLER & CRISPE

Patent Medicine Vendors. Druggists' Sundriesmen. Toilet and Perfumery Agents.

**80 / 84 CLERKENWELL ROAD,
LONDON, E.C.1.**

SANDALWOOD OIL

Distilled from **SANTALUM ALBUM**. linn. at the **MYSORE GOVT. FACTORIES**

90%

ACTUAL SANTALOL
GUARANTEED B.P.
& U.S.P. STANDARDS
FOR FURTHER
INFORMATION APPLY.



TRADE COMMISSIONER
for MYSORE in LONDON
GRAND BUILDINGS
TRAFALGAR SQ., W.C.2

THE METHODS OF DISTILLA-
TION AND CONTROL ADOPTED
IN THE FACTORIES OF THE
MYSORE GOVERNMENT ARE
SUCH THAT BUYERS MAY
REST ASSURED THAT EVERY
CONSIGNMENT OF EAST
INDIAN SANDALWOOD OIL
RECEIVED BY THEM WILL BE
OF PRACTICALLY IDENTICAL
COMPOSITION



Sole Agents for America:

MESSRS. W. J. BUSH & CO., INC., 11 EAST 38th STREET, NEW YORK

Sole Agents for Canada:

MESSRS. W. J. BUSH & CO. (CANADA) LTD., 432 St. HELEN ST., MONTREAL

Agent for Germany and
the Balkan States:

MR. LEOPOLD LASERSON, ALTE JACOBSTRASSE 20-22, BERLIN, GERMANY, S.W.68



INDISPENSABLE

DISPENSING SERVICE!

*Packed in Sealed Non-Returnable
Standardized Fibre Cartons in the
Following Quantities Only*

1 oz. Packed 2 gross per case.		8 oz. Packed 6 doz. per case.	
2 oz.	" 1/2 "	10 oz.	" 4 "
3 oz.	" 1 "	12 oz.	" 4 "
4 oz.	" 1 "	16 oz.	" 4 "
5 oz.	" 6 dozen "	20 oz.	" 3 "

**"The
Perfect
Pair"**

Cap and Bottle
manufactured by

THE special U.G.B. process of Sterilizing by passing every single bottle through boiling distilled water and drying in super-heated filtered air has proved a boon to the busy dispenser.

Straight from sealed fibre dustproof cartons—ready for instant use—sparkling bright and scientifically sterile.

UNITED GLASS BOTTLE
MANUFACTURERS • LIMITED

The Largest Manufacturers of Glass Bottles in Europe.
40-43 NORFOLK STREET, STRAND, LONDON

Telephone:
TEMPLE BAR 6680 (10 lines)

W.C.2
Telegrams:
"Unglaboman, Estrand, London"

Bottles

of distinctive quality and design

Let us solve your glass packaging problems

We make every type
of container

An immense variety
of moulds
is at your
service

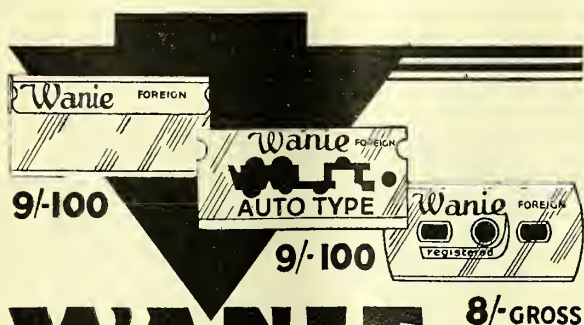


Medicals, sprinkler neck
perfumes, toilets,
emulsion, sauce, feeding
bottles — whatever your
requirements

Lax & Shaw Ltd.

WHOLESALE & EXPORT ONLY

Registered Office : **Albert Glass Works, Hunslet, Leeds 10**
Three Factories : **Albert, Clarence and Donisthorpe**



WANIE

8/-GROSS

The Blade for Every Razor!

Send for Samples to Dept. C D.
LONDON & PROVINCIAL
FACTORS, LTD.

146 THEOBALDS ROAD, W.C.1

and at

16 WITHY GROVE, MANCHESTER

Enquiries from Irish Free State invited

Wholesalers are invited to apply for Trade Terms

3/9
GROSS

BRITISH
BLADES

HAND
HONED

TIM

THE FAMOUS
TIM
REGD
RAZOR BLADE

PATENT NO.
296,597

WARDONIA



The sloping serrations bend
the hair sideways; blade
then cuts with a "barber's
stroke." You can dip this
razor into boiling water
without risk to the skin.

• Display Cards FREE

• Generous Profit

• Order - NOW

Sole
Makers:

THOMAS WARD & SONS LTD., Wardonian Works, Sheffield 1, England

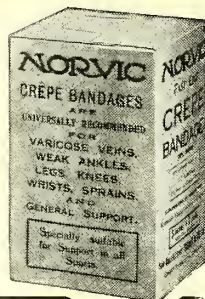
NORVIC

BLUE CARTON CRÊPE BANDAGES

The Blue Carton, prominently
displayed in the window or
on the counter will increase
your crêpe bandage sales
enormously. A.P.A.T.A.
LINE with FULL 33%
PROFIT.

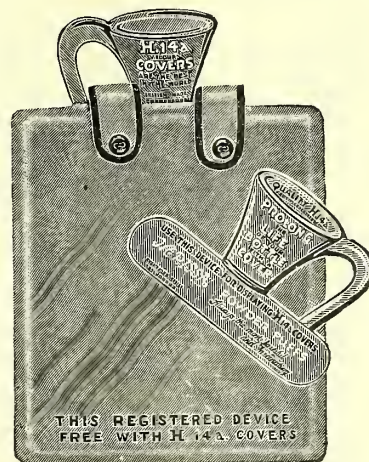
From leading wholesalers.

Sole manufacturers: Grout & Co. Ltd.
35 Wood Street, London, E.C.2.



SOLPORTS MAKE THE BEST COVERS FOR HOT WATER BOTTLES

The Best Velours Cover Made
IS THE
QUALITY H.14a
VELOURS



TO HELP YOUR DISPLAY, WE
ARE SENDING, FREE OF
CHARGE, TWO OF THESE
REGISTERED DEVICES WITH
EVERY DOZEN H.14a COVERS

SOLPORT BROTHERS LIMITED

184-192 GOSWELL ROAD, LONDON, E.C.1
OBTAINABLE FROM ALL LEADING WHOLESALERS

ZEAL

Clinicals

The Choice of Experts

BRITISH MADE

NO HIGHER IN PRICE THAN NONDESCRIPT MAKES

Also Household, Bath and Works Thermometers, the best of their kind

G. H. ZEAL LTD.
MORDEN RD., MERTON, LONDON, S.W.19
Phone: Liberty 2283-4-5



WILLIAM MATHER, LIMITED

DYER STREET, MANCHESTER.

(Established 1826)



ZINC OXIDE and RUBBER ADHESIVE PLAISTER ON SPOOLS.

POROUS PLAISTERS. ELASTIC PLAISTER BANDAGES.
ANTISEPTIC PLAISTER DRESSINGS, "CROCUS" CORN COMFORT, Etc.

HOT WATER BOTTLES

HANCOCK'S HANDMADE HOT WATER BOTTLES are built for service under the most exacting conditions. Only the strongest fabric and the best quality rubber are used. The seams are specially reinforced and solid stoppers are fitted. There is 120 years' experience behind each bottle. Made in Red or White. Hancock's are also manufacturers of the finest quality Moulded Bottles in varieties of colours plain or marbled.

Write for name of Stockists.

JAMES LYNE HANCOCK LIMITED

THE FIRST RUBBER FACTORY IN THE WORLD
266 GOSWELL ROAD, LONDON, E.C.1

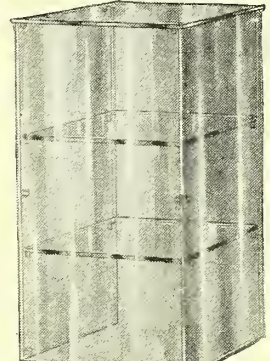
FOUNDED 1820
Phone: Clerkenwell 4410-4412 Grams: Masticator, Barb, London



The preference of women for Southall's Sanitary Towels brings steady sales all the year round.

The "ORIGINAL" and most popular.
The "CELTEX" soluble, easily disposed of.
The "K" made entirely of absorbent cotton wool, with very soft cover.
The "COMPRESSED" for travelling. A very popular line.

SOUTHALL, BROS. & BARCLAY LIMITED · BIRMINGHAM



THE IDEAL

CHEMISTS' COUNTER CASE

The Case that prevents pilfering
No. C.D.F. 4479

Frameless Case with chromium plated clips. New $\frac{1}{4}$ " glass, open at back
30" high × 15" wide × 12" back to front
4/7/6

Other size stocked
Send for our new Lists
Nos. C.D. 1483 & 1500

DUDLEY & CO., LTD.
451 Holloway Rd., London, N.7
City Showrooms:
65 FORE STREET, E.C.

THE CHEMIST & DRUGGIST SUPPLEMENT

is an infallible help when you want to buy or sell a business, secure an agency, an assistant or a situation, or SELL SURPLUS STOCKS

The TARIFF is printed on the front cover of the COLOURED SUPPLEMENT

Address all inquiries to:—

The Publisher: THE CHEMIST AND DRUGGIST,
28 ESSEX STREET, LONDON, W.C.2



● **BRITISH MADE.**
WRITE FOR SAMPLES
AND QUOTATIONS.

PROFIT FOR HIM ...AND FOR YOU ?

It's all the same to him whose product keeps his till busy — whose attractive pack turns a casual glance into a simple sale — who, besides himself, profits. But is it all the same to you — or have you, too, changed over to MONO?

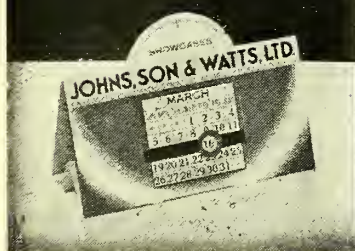
MONO

The first and foremost of "nested" containers

MONO CONTAINERS LTD., Park Royal, London, N.W.10. Tel: Willesden 0900-1-2, 5131-2

**CARTONS
FANCY BOXES
SHOWCASES
FOLDING BOXES
WIRE-SEWN
BOXES
EMBOSSSED &
PRINTED LABELS
SHOWCARDS
NOVELTIES, Etc.**

● *May we quote you?*



JOHNS, SON & WATTS
LIMITED / 40 CITY ROAD, LONDON, E.C.1

Telephone: Clerkenwell 1128
Telegrams: Johns, Phone, London.

Are you stocking

YESTAMIN?

Dried Yeast in its most valuable and most convenient form—powder and tablets. Generous terms and good discounts. *Write today to:*

THE ENGLISH GRAINS Co. Ltd., Shebnall Road, Burton-on-Trent

ENGLISH OIL OF CAMOMILE

(ANTHEMIS NOBILIS)

From Plants Grown on My Own Farm

R. W. B. STARKE

The CHESTNUTS FARM, EYE, SUFFOLK

Also ENGLISH CAMOMILE FLOWERS

A DELIGHTFUL NEW NUTRITIOUS STIMULANT
—a pleasant combination of milk, eggs, and really good wine. A perfect tonic with an alluring taste. This is a profitable line most attractively packed.

'VINTEGG' THE ORIGINAL EGG WINE

Ask for descriptive literature and special terms.

JOSEPH HOBSON & SON, Ltd., Regent St., Leeds 2

URICURE TABLETS

Greatest of all Rheumatic Remedies

1/3 SIZE 7/ DOZ 3/ SIZE 17/6 5/1 SIZE 25/1

THE ACTON PILL & TABLET CO LTD ASH VALE SURREY



SHADEINE FOR TINTING GREY HAIR

This popular article is largely advertised and stocked by all Wholesale Houses.
Trial size 8/1, per doz. ... 6/-
1/4 size, per doz. ... 12/-
2/6 size, per doz. ... 24/-
3/9 size, per doz. ... 36/-

The SHADEINE Co., 58, Westbourne Grove, London, W.2

Louis de Luxe Products

ALL TOILET PREPARATIONS

PROPRIETORS:

Low, Son & Haydon, Limited

5 QT. QUEEN ST., LONDON, W.C.2 COURT PERFUMERS
TELEPHONE: HOLBORN 6410 EST. 1790

F. MAUND & E. BERG (SHOWCASES) Ltd.

SHOPFITTERS & SHOPFRONT BUILDERS

175/9 OLD STREET, LONDON, E.C.1
Telephone: Clerkenwell 1782/3

are offering for sale, at competitive prices, an extensive and exceptionally full range of Chemists' Fittings, Second-hand and New.

C. & D. Stock-Taking Sheets

Halve the Labour of Taking Stock.

Price of Complete Pad, 2/6 post free.

The Chemist & Druggist, Publications Dept., 28 Essex St., London, W.C.2

ALL CHEMISTS SHOULD STOCK

ABDINE

THE GOLD MEDAL HEALTH DRINK. Quick Seller. Big Profits. Over 60 years' Reputation. "Abdine" is obtainable from the Wholesale Houses. Attractive Display Material constantly available.

DUNCAN McGLASHAN LTD., ABDINE WORKS, WESTFIELD RD., EDINBURGH

TENZ

SELL AT SIGHT

A quick selling sideline is always worth while. Here is a profitable one for you. Tenz Tablets speedily remove breath odours in a pleasant fashion and there is a remarkable demand for them. Neatly packed in dainty outers, they take up very little counter space—but they do sell. Order direct from your usual wholesaler.

TENZ (London) LIMITED,
59/60 Chancery Lane, London, W.C.2



3/3 per 1,000

ALL SIZES
(Carr. paid on 4,000)

AZYMA CACHETS

FRENCH, MORSTADT, and the DRY CLOSING SERIES
Special quotations for quantities and for printing

Write for Samples to
CICERO S. CLARK, Sole Agent
12 RICHMOND ROAD W.2

NOW IS THE TIME TO ORDER

DOLS' VOLATALISE FLANNEL

The Wonderful Remedy for RHEUMATISM, NEURITIS, SCIATICA, etc.
Write to DOLS' VOLATALISE FLANNEL LTD., VIADUCT ST., HUDDERSFIELD

How are your Stocks of

WILLIAMS'

Shaving Preparations?

Sole Distributors:

SCOTT & BOWNE, LTD.

10/11 Stonecutter Street - London, E.C.4

WIRE SCREENS & PERFORATED METALS

WIRE CLOTH in meshes up to three-hundred per inch.

PERFORATED METAL in any size and shape of hole and in every thickness practicable.

THOMAS LOCKER & COMPANY, LIMITED

WARRINGTON - ENGLAND

Established half a century.

Phone: 910



FOR BETTER BOTTLES

-better see **BARNETT!**
SPECIALISTS IN TOILET BOTTLES!

WHOLESALE ONLY

JACK L. BARNETT, LTD.

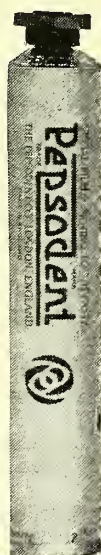
18 Basinghall St., Leeds, 1

Phone: 28447

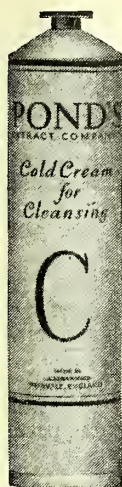
FREE and POST FREE NEW CO-RE-GA CARD

Display it and increase your sales

THOS. CHRISTY & Co., Ltd., Old Swan Lane, London, E.C.4



FIRST CLASS PRODUCTS



USE

BETTS' COLLAPSIBLE TUBES

Tubes give better service than tins; they are more hygienic. Betts' Tubes are unsurpassed in the trade for quality and finish.

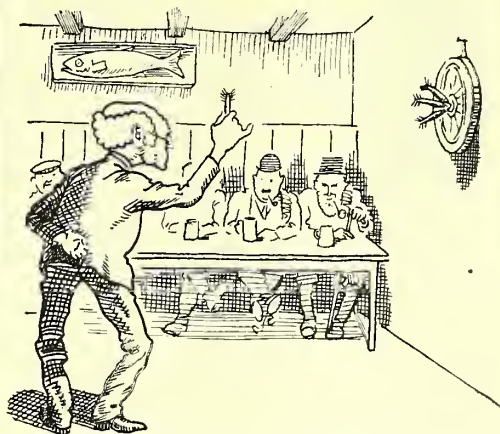
New Zealand Representatives
NEIL CROPPER & Co., Ltd.
Post Box 74,
Dilworth Bldg.,
Auckland,
New Zealand

BETTS and COMPANY LTD.,

241 CITY ROAD, LONDON, N.1

Telephone: Clerkenwell 1918

The Specialist!



The Season has commenced !!!

..... we claim our Season never ends!

Year in, Year out!

We specialize in

PRINTING
that satisfies the
DRUG AND ALLIED TRADES

Send us your next enquiry

ALF HARRISON & SONS LTD

CHEMISTS' AND ADVERTISING PRINTERS.

BURLEY ROAD, LEEDS-4

LONDON OFFICE: SENTINEL HOUSE,
SOUTHAMPTON ROW, W.C.1

Phone: HOLborn 9200



The Truth about **IODINE LOCKETS** for the Prevention of **COMMON COLDS,** **INFLUENZA, and other GERM COMPLAINTS**

THE idea of imprisoning solid Iodine in a stoneware locket, with a portion of the surface left unglazed, so that Iodine vapour could escape in a regulated manner by diffusion over a period of many months, originated with Dr. Goodfellow, of Chesterfield.

As a doctor he refused to patent or protect his invention. There have been many imitations, but not one of them on the diffusion principle, which is the only scientific method. James Pearson, Ltd., manufacture the lockets and other iodine devices, which are made under the personal supervision of Dr. Goodfellow, and are sold under the registered name of "Xodo." This has been done to protect the public against worthless imitations. There is no metal used in their construction for reasons which every chemist will appreciate. The New Health Society (Pres. Sir Arbuthnot Lane) investigated the merits of these lockets and our testimonials were submitted to their experts. They secured unstinted praise. See report, "New Health," December, 1933 (copy free on application). One chemist (Messrs. A. Greaves & Son, Ltd., Chesterfield) has sold over 5,000, and still sells from 9 to 12 dozen per week.

BEWARE OF IMITATIONS

now so extensively advertised. An analyst reports on one of these imitations that the value of its iodine content is only one-twentieth of a penny. Copy of analysis on request. See "John Bull's" comments on these lockets, September 13, 1934.

Get a small stock of "Xodo" Locketts now. They retail at 2/- and they make a very profitable line for enterprising chemists. We also make a small pendant that is sold at 1/-. Write for our new terms, showcards, dummy cards, and literature free. All postage paid. Get free particulars today from the sole manufacturers:—

JAMES PEARSON, Ltd., C.D.8, Oldfield Laboratories, Brompton, Chesterfield

THE CHEMIST & DRUGGIST COMPACT LIBRARY

PHARMACEUTICAL FORMULAS (P.F., Vol. I).

The tenth edition of this, the most complete pharmaceutical formulary in the English language, is devoted to the official and semi-official preparations of practically every country in the world. This volume (published 1929) contains 1146 pages.

Price 15s., by post 15s. 9d.

PHARMACEUTICAL FORMULAS (P.F., Vol. II).

Published 1934. Supplementary to Vol. I, and known as "The Chemist's Recipe Book." Contains formulas for adhesives, beverages, cleaning materials, culinary and household requisites, horticultural and agricultural preparations, inks, lozenges, perfumes, photographic preparations, polishes, soaps, toilet articles, varnishes, veterinary preparations, etc., including numerous descriptions of practical methods employed in their manufacture, and other information of use to pharmacists and manufacturers. Over 1000 pages.

Price 15s., by post 15s. 9d.

PHARMACEUTICAL BOTANY.

An attractively written book, dealing with the plants mentioned in the examination syllabus of the various pharmaceutical examining bodies. A useful gift for apprentices and assistants who have not passed the qualifying examinations.

Price 5s., by post 5s. 4d.

THE ART OF DISPENSING.

The tenth edition of this well-known work has been thoroughly revised and considerably improved, while maintaining the features which have made it so popular with several generations of students. It is kept by chemists in the dispensary for ready reference in cases of difficulties arising in the course of the day's work.

Price 8s., by post 8s. 6d.

VETERINARY COUNTER PRACTICE.

Chemists interested in veterinary practice will find the work indispensable, as it deals with the ailments of horses, cattle, sheep, pigs, dogs, and poultry, and the

remedies that can be supplied. New edition 1930 (Eighth) brings this book thoroughly up to date.

Price 7s. 6d., by post 8s.

THE PHOTOGRAPHIC CHEMIST.

This is a concise guide to chemists commencing and carrying on a photographic department.

Price 3s. 6d., by post 3s. 8d.

DISEASES AND REMEDIES.

Now in its sixth edition (March, 1931). It has been carefully revised by an experienced medical practitioner and parts of the book have been rewritten.

Price 5s., by post 5s. 3d.

WOOTTON'S CHRONICLES OF PHARMACY.

In two vols., maroon cloth, comprising 770 pages.

Price 10s. 6d., by post 11s. 3d.

PRACTICAL METHODS OF URINE ANALYSIS.

The object of this book is to give chemists exactly the information they want on the subject. The book was written by a pharmacist who was an expert in this work, and has been revised by a medical practitioner and lecturer of long experience in clinical analysis. (Fourth Edition.) Contains 97 pages.

Price 4s., by post 4s. 3d.

THE CHEMISTS' DICTIONARY OF MEDICAL TERMS.

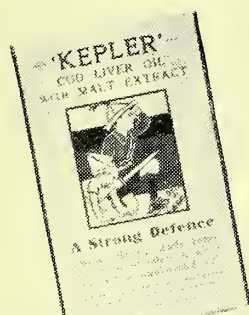
A small book which explains the meaning of medical terms as to which customers often inquire from chemists. In addition to concise definitions of these technical terms, notes are given on the treatment of the more important ailments.

Price 3s. 6d., by post 3s. 8d.

The "C. & D." PRICE LIST FORMULARY, "P.L.F."

All users of the C. & D. Retail Dispensing Price List require a copy of this Formulary. It brings together the formulas for unofficial preparations, the prices of which are quoted in the Price List. It is a choice collection of good formulas for articles in everyday request by the public. Price 2s. 6d. post free.

Published by **THE CHEMIST AND DRUGGIST, 28 Essex Street, LONDON, W.C.2**
Branch Offices: Manchester and Sheffield, England. Glasgow, Scotland. Paris, France. Melbourne and Sydney, Australia. Auckland, New Zealand.



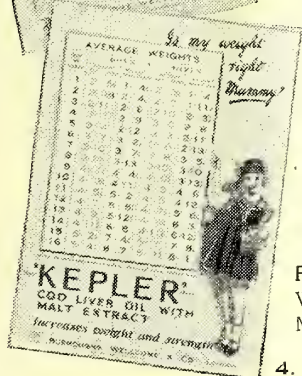
1.



2.



3.



4.

Support for your sales efforts

Your displays of seasonable preparations will be strengthened by the inclusion of these showcards.

Medical commendation and public appreciation of 'KEPLER' COD LIVER OIL WITH MALT EXTRACT make it a "worth-while" product for continuous display.

Please quote showcard numbers when making your requests

1. Size $8\frac{3}{4} \times 5\frac{1}{2}$ in. No. 0548
2. „ 15×10 in. No. 0744
3. „ $10\frac{1}{4} \times 7$ in. No. 0700
4. „ $10\frac{1}{4} \times 7\frac{1}{4}$ in. No. 0484

TRADE **'KEPLER'** MARK

**COD LIVER OIL
WITH
MALT EXTRACT**

London Prices
to the Trade
24/6 and 43/6 per doz.
(Subject)

For
Weighing
Machine



G 1840

BURROUGHS WELLCOME & CO., LONDON

COPYRIGHT

RADIO-MALT

RADIOSTOLEUM



Products of THE BRITISH DRUG HOUSES LTD, LONDON, N.1

THE CHEMIST AND DRUGGIST

A Weekly Journal of Pharmacy, the Drug, Chemical and Allied Trades

*The official organ of The Pharmaceutical Society of Ireland,
The Pharmaceutical Society of Northern Ireland,
The Chemists' and Druggists' Society of Ireland, and of
other Chemists' Societies in Overseas Dominions*

PUBLISHED AT

28 ESSEX STREET, STRAND, LONDON, W.C.2

Telegrams: "Chemicus, Estrand, London" Telephone: Central 6565 (8 lines)

BRANCH OFFICES

4 CANNON STREET, MANCHESTER (TEL.: BLACKFRIARS 3052) 54 FOSTER'S BUILDINGS, HIGH STREET, SHEFFIELD (TEL.: 22458)
19 WATERLOO STREET, GLASGOW (TEL.: CENTRAL 2329) 372 FLINDERS LANE, MELBOURNE, AUSTRALIA
155 AVENUE DE WAGRAM, PARIS, XVII^e (TEL.: ETOILE 19-79)
PLANTAGE FRANSCHELAAN 32 AMSTERDAM-C HOLLAND

CONTENTS

VOL. 121. NO. 2864

DECEMBER 29, 1934

PAGE	PAGE	PAGE	PAGE
Business Changes ... 785	Food and Drugs Acts 792	PROGRESS OF PHARMACY:—	Medicine 780
Coming Events 785	Ideas for Displays ... 775	Pharmacy 777	Optics 782
Correspondence:—	Insurance Act Dis-	Pharmaceutical	Pharmacology 782
Letters 795	pensing 775	Chemistry 778	Photography 783
Miscellaneous In-	Irish Notes 772	Analytical Chem-	Veterinary Medicine 783
quiries 796	Legal Reports 774	istry 778	Retrospect 796
Subscribers' Sym-	Marriages 785	Biological Chem-	Scottish Notes 773
posium 796	New Companies and	istry 779	Topical Reflections ... 773
Deaths 785	Company News 774	Industrial Chem-	Trade Marks 784
Editorial Articles:—	News of the Week ... 771	istry 779	Trade Notes 784
A Year of Great Ex-	Personalities 785	Pure Chemistry and	Trade Report 793
pectations 787	Poisons List and	Physics 779	Wills 785
Liquor Arsenicalis,	Rules 776	Essential Oils 779	
B.P. 791			

News of the Week

Oxalic Acid Re-exempted

The Treasury have made an Order under Section 10 (5) of the Finance Act, 1926, continuing the exemption of OXALIC ACID from Key Industry Duty till March 31, 1935.

Contracts

Guisborough Urban Council.—Mr. J. W. Frank, chemist and druggist, drugs, etc.

Great Yarmouth Corporation.—Mr. D. Tunbridge, chemist and druggist, drugs, etc.

Hunts Public Assistance Committee.—Goggs & Osborne, chemists, medical supplies to the Huntingdon Institution; Mr. E. S. Callcutt, chemist and druggist, medical supplies for St. Neots Institution.

Inquests

A verdict of "Misadventure" was returned at an inquiry concerning the death of Mr. John J. Gray, chemist and druggist, Hazledale Road, Walton, Liverpool, who was knocked down by a motor van while crossing Pensby Road, Heswall, Cheshire, on December 18.

An inquest was concluded by the Bury (Lancashire) coroner, on December 18, on the body of a baby twelve days old. The inquest had been adjourned for the evidence of Mr. P. H. G. Lord, chemist and druggist, Rawtenstall, the maker of a medicine which had been given to the child. Mr. H. S. Cotton, solicitor, who appeared for Mr. Lord, asked a medical witness (whose evidence was that death was due to morphine poisoning) if the fact that 200,000 bottles of the medicine had been sold and this was the first complaint would alter his

opinion that it was unsuitable for children. The doctor answered in the negative, stating that according to the analyst's report there was 2.6 mgm. of morphine in each bottle. Morphine, the witness added, was an extremely unsuitable drug for young children. Mr. Lord stated that the medicine had been made by his family for the past eighty years, and had been registered by him. Medical practitioners had recommended it. The jury returned a verdict of "Death by misadventure."

Birmingham

A Birmingham pharmacist informs us that the attendance book of the classes for Midland students, mentioned in a recent "Retrospect of Fifty Years Ago" (C. & D., December 8, p. 714) is still in existence. Here are some of the names:—Mr. Grice, who became Colonel Grice and head of Smith, Stanistreet & Co., Calcutta; Mr. Gibson, a successful pharmacist who had a large business in Gooch Street; Mr. Brampton, inventor of the cycle chain which revolutionised cycle locomotion; Mr. F. Winfield, who for many years had a pharmacy in Solihull and is succeeded by his son; Mr. Barrett, who went to live at Messina and experienced the great earthquake there; Mr. Belcher, head of Standley, Belcher & Mason, Ltd., chemical apparatus dealers, Church Street, Birmingham; Mr. Aston, who became a medical man; Mr. J. F. Liverseege (formerly city analyst); Mr. Coole Kneale, a successful pharmacist at Sparkhill and subsequently a medical practitioner and head of the Pharmacy and Pharmacological Department of Birmingham University.

Bradford

Members of Bradford District Branch of the Pharmaceutical Society gathered at the Midland Hotel, on

December 13, to hear a lecture, illustrated by lantern slides, on "Infra Red Photography." The lecturer was Mr. H. Flower (Ilford, Ltd.). In the absence of Mr. W. Fysh (chairman), through indisposition, Mr. F. C. Wilson presided over the largest attendance of members this season, supplemented by visitors from the Leeds Astronomical Society. Hearty thanks were accorded to the lecturer on the proposition of Mr. F. Shepherd.

A meeting of the Bradford Branch of the National Pharmaceutical Union was held on December 4, Mr. W. Sutcliffe presiding. The chief business was an address by Mr. W. R. Holmes, of Effective Publicity Services, Ltd., in respect of a suggested scheme of local collective advertising by members of the Branch. A number of questions on points of detail were asked by Messrs. Thorpe, Richardson, Brown and Hudson, to which Mr. Holmes gave informative replies. A hearty vote of thanks was accorded the speaker, and it was resolved to call a meeting for January 8 to go into the matter more closely.

Grimsby

Our illustration shows the window display of "Interesting Drugs" made at the pharmacy of Mr. Charles



Dewing, M.P.S., Grimsby, in connection with the recent local shopping festival.

Ipswich

The annual meeting of the Ipswich and Suffolk Branch of the National Pharmaceutical Union was held recently, Mr. S. J. Stearn presiding. The officers for the ensuing year were elected as follows:—*President*, Mr. S. J. Stearn; *Secretary and Treasurer*, Mr. L. Piper, The Wolsey Pharmacy, St. Nicholas Street, Ipswich; *Committee*, Mrs. Cock, Mr. Collins and Mr. Crossdale. The treasurer was able to report a satisfactory balance in hand. Mr. Stearn, who is a member of the N.P.U. Executive, gave an instructive talk on the activities of the Union.

London

A meeting of the Guild of Public Pharmacists was held on December 13, the president (Mr. H. Davis) in the chair. Mr. C. E. Corfield gave an interesting address on "The B.P.C., 1934." A discussion followed in which Miss Jacob, Miss Dale and Mr. W. A. Knight took part. A vote of thanks to Mr. Corfield was proposed by Mr. F. G. Hobart and seconded by Mr. H. Berry.

In the King's Bench Division of the High Court, on December 21, Mr. Justice du Parcq awarded the sum of £800 damages to Mr. Richard Ostermann, Creffield Road, West Acton, who sued the Standard Surgical Manufacturing Co., Ltd., Westfield Road, Acton, for wrongful dismissal. His lordship said Mr. Ostermann was

appointed factory manager and technical adviser to the company on April 11, 1933, for ten years at a salary of £1,200 per annum. A clause in the agreement stated that the appointment should be terminated if the company ceased to carry on business or went into liquidation. A receiver was appointed by debenture holders on April 12, 1934, and on April 13, 1934, Mr. Ostermann was dismissed by the receiver. A counterclaim, asking for an order that the plaintiff should transfer to a person nominated by the company 5,500 ordinary shares on their transfer to him of letters patent and payment of £25, was dismissed. The defendants were ordered to pay the costs.

Newcastle-on-Tyne

The premises of Mr. Norman Payne, chemist and druggist, Westgate Road, were broken into recently and various articles were stolen.

The steady progress in the business of Scott & Turner, Ltd., proprietors of Andrews Liver Salt, was demonstrated, recently, when the new staff canteen and rest room at Andrews House was declared open by Mr. France (managing director). Supporting Mr. France were Colonel E. Robinson, Mr. H. S. Tegner (directors), Mr. J. A. L. Thompson (secretary), Mr. J. E. Diamond (works manager), and Mr. S. Traves (sales manager). Tea was provided for nearly 400 employees in the new canteen and afterwards the staff were the guests of the company at the Paramount Theatre. Andrews House was described in the *C. & D.*, November 17, p. 601.

A meeting of the Newcastle, District and Northumberland Branch of the Pharmaceutical Society was held on December 6, when Dr. Tyrer (Imperial Chemical Industries, Ltd.) gave an address on "Heavy Water." The lecturer dealt lucidly with discovery, manufacture and potential uses, illustrating his points by lantern slides. A sample of heavy water was on view, but was carefully guarded, as its commercial value was roughly £50. The lecture was listened to with great appreciation. On the motion of Mr. R. Hepworth a cordial vote of thanks was accorded the lecturer. Mr. R. H. Dennison occupied the chair.

Miscellaneous

HONEY REGULATIONS.—The Agricultural Produce (Grading and Marking) (Honey) Regulations, 1934, dated November 28 (S.R. & O., 1934, No. 1337), have been issued (price 2d.) by the Stationery Office. Specifications for the three grades mentioned are given in Schedules.

WINDOW-DISPLAY AWARDS.—At a window dressing competition held at Sandown and Shanklin, Isle-of-Wight, the prize in the section for chemists at Sandown was awarded to Frank Woollings & Son; and at Shanklin W. T. Deeks & Son and Boots, Ltd., tied for the first prize.

Irish Notes

Pharmaceutical Society of Ireland

The new edition of the Calendar of the Pharmaceutical Society of Ireland, which will be published in January, contains some interesting features. By the courtesy of the president and Council our representative has obtained an advance view of the Calendar as prepared for press. The Registers will show the register number opposite each name, and a simple method has been adopted of indicating members and associate druggists. Much "dead wood" has been removed. The new Dangerous Drugs Act has been inserted, and the Regulations will be added in due course. The registrar has completed a thorough revision of all the Registers. In the last year 108 names have been removed from the Register of the Pharmaceutical Chemists, ninety-six from the Register of Registered Druggists, nine from the Register of Chemists and Druggists, and thirty-five from the Register of Qualified Assistants. The preliminary registrations show a rise from seventy to 105. This demonstrates the foresight of the Council in again raising the standard. Twenty-five pharmaceutical chemists quali-

fied during the year and thirty-two were reported dead. This is the first occasion on which the deaths exceeded the new entries.

Brevities

Much sympathy has been extended to Mr. Michael Kennedy, Ph.C., The Mall, Waterford, on the recent death of his father.

Mr. R. F. McCartney, Ph.C., presided at a banquet given in Coleraine on December 14 to Alderman Christie, Mayor of the Borough.

Cork Chemical & Drug Co., Ltd., have been appointed contractors to Cork Mental Hospital for medicines, drugs, and medical appliances.

Mr. J. Carroll Culbert, Ph.C., was the speaker at the meeting of the National Adult School Union in Belfast on December 16. His subject was "South Africa."

Mr. B. P. Hickey, a member of the Council of the Pharmaceutical Society of Ireland, has been elected president of the recently formed branch of the Catholic Young Men's Society at Rush, co. Dublin.

The death occurred at Cork, recently, at the age of seventy-five, of Mr. Daniel J. O'Mahony, who was city analyst of Cork, and later analyst for the combined counties of Cork, Kerry, Queens County and Tipperary.

Belfast

Mr. Fred Storey (president of the Pharmaceutical Society of Northern Ireland and the Chemists' and Druggists' Society of Ireland) and Mrs. Storey were among the guests at the annual social function of the Guild of Queen's University, Belfast.

Scottish Notes

Brevities

In spite of the mild weather some chemists report that dispensing is very good.

At a meeting of Shotts (Lanarkshire) Merchants' Association, Mr. William Chapman, chemist and druggist, was elected president for the ensuing year.

The Royal Dispensary and School of Pharmacy of Edinburgh held their annual dance on December 19. A gathering numbering about 120, composed of pharmacy students past and present and their friends, enjoyed an excellent evening's dancing. In the course of the evening the principal (Mr. Eric Knott, Ph.C.) addressed the assembled company. Prizes were presented by Mrs. Knott to the two couples who were fortunate in the spot waltz. The duties of M.C.s were ably performed by Messrs. T. Arthur, W. Hall, D. McCallum and J. Priestman. The dance concluded with the singing of "Auld Lang Syne."

The report on the affairs of the Chemists' Friendly Society for the period from July 6, 1933, to July 1, 1934, to be submitted at the annual meeting on January 31, states, *inter alia*, that the Society is in a strong financial position. The rates of benefit (cash and non-cash) compare more than favourably with those of most other approved societies. The Society's invested capital stands at £35,905 10s. 1d. (nominal value). Five directors, Messrs. John Dick, John B. McVitie, John Weir, A. B. Gilmour and S. G. Home fall to retire and are eligible for re-election. The arbitrators, Messrs. A. O. C. Dewar, J. H. Hart, John Keall, John Neil and Charles Simpson, fall to be re-elected.

Topical Reflections

By Xrayser

As Was Predicted

in THE CHEMIST AND DRUGGIST a great effort is going forward to rush the Council into the appointment of an architect in connection with that preposterous £250,000 scheme. I appeal to the one and only counsellor who has shown real courage in this matter not to stay his hand. I hope every member who realises the critical importance of this subtle move to tie their hands will add his voice to mine, and urge Mr. Hines to take every legitimate step to stop this plunge before it is too late.

I Like the Spirit

that animates the writer of the article on "Youth, the Key to the Problems of Pharmacy" (C. & D., December 22, p. 755): it is as stimulating as a stiff breeze in sultry weather. I agree that there is a "youth movement" due, and overdue, in pharmacy. The greybeards are in the majority on the Pharmaceutical Society's Council, in the N.P.U., on the Executive of the P.A.T.A., and controlling other organisations of the drug trade. The "dead hand" presses heavily on many aspects of pharmaceutical policies; tradition often sits like a vulture at the feast when any newer methods of doing certain things are suggested. No sane-minded observer, looking dispassionately at pharmacy, can say that all is well with it; any reader of the C. & D. knows that week in and week out attention is being directed to aspects of the trade which are not too satisfactory. But how is youth to set about the task of reconstruction? Several ways are open as a start. Perhaps the best and simplest is to join the local pharmaceutical association or the branch of the Society. Here experience in debating and putting one's point of view clearly and crisply can be gained; from this the youth may develop as a man of pharmaceutical affairs and eventually get elected to the Council, or that of the N.P.U. or the P.A.T.A. Another way is to join up with his fellows in a league: there is one already. There is, too, the way of the publicist, the

man who has a flair for writing. But these ways all take time; and the young pharmacist often finds himself middle-aged before he is in a position to do anything.

I Suggest

that a by-election occasionally to fill a seat rendered vacant on the Council would be a good arrangement. It would show, as it does in politics, which way the wind is blowing; indeed, it might be a quicker way of deciding certain issues than any other method. I agree with your correspondent (p. 769) that we want several likely candidates who will hold themselves ready to contest an election. It is no use waiting till the annual election is a week or two away. A candidate's association, if you like, a list of men ready to fight; it does not much matter how they come to light; an organised campaign might result in a veritable upheaval.

Guess

(but I know your readers never will guess, even if you can) the number of persons employed at Bloomsbury Square to-day. The figure was given to me the other day as 120. This is the sort of information you do not find in the official Calendar of the Society nor in any official papers. You must come to THE CHEMIST AND DRUGGIST when you want any real information of what is happening behind those closed doors. Not only are such facts rarely disclosed, but there is no way of making year-by-year comparisons. Who are these 120 persons? What are they paid? What do they do? Particularly what do they do to protect the interests of chemists and druggists in business? I often wish, when a pointed fact like this is brought to my attention, that I had the time at my disposal to dig out all the relevant comparisons of past years. In what way is the member better off to-day than he was, say, in 1900? The staff is 120; it has increased by sixteen in the year 1934. It is legitimate to ask where this is leading us.

Legal Reports

Alleged Breach of Agreement: Judgment.—In the Chancery Division of the High Court, London, on December 21, Mr. Justice Bennett delivered his reserved judgment in the action concerning the sale in this country of Lesquendieu products manufactured at Alperton. The action was brought by J. Lesquendieu, Ltd., Gerrard Street, W.1, to restrain Mr. Joseph Lesquendieu, Mount Pleasant, Alperton, from selling or offering for sale articles of perfumery under the Lesquendieu trade marks and, in particular, under the trade mark "La Reine des Crèmes," in alleged breach of an agreement of March 30, 1926 (*C. & D.*, December 1, p. 664). Mr. Justice Bennett held that under their contract the plaintiffs are bound to exploit only the goods manufactured by the French companies and not goods manufactured by the defendant. The plaintiffs were ready and willing to buy from the French La Reine des Crèmes Co., but that company, which was controlled by the defendant, refused to supply them. The sales might not be so profitable as previously, but that was immaterial to what he had to decide. It followed that there had been no refusal by the plaintiffs to carry out their contract. All they had done was to refuse to exploit the goods of the defendant. He granted the injunction asked for during the continuance of the agreement, and directed an inquiry as to damages. The defendant was ordered to pay the costs of the action and his counterclaim was dismissed with costs, the costs of the inquiry being reserved.

Later in the day, on the application of Mr. Evershed, K.C., for the defendant, his lordship suspended the operation of the injunction pending the disposal of an appeal by the defendant, who undertook to keep an account of the profits made by him meanwhile.

New Companies and Company News

P.C. means Private Company and R.O. Registered Office

TEASANO CO., LTD. (P.C.).—Capital £500. Objects: To carry on the business of chemists, druggists, etc. R.O.: 31 Alfred Place, S.W.7.

E. A. DARLEY, LTD. (P.C.).—Capital £300. Objects: To carry on the business of wholesale and retail chemists and druggists, etc. R.O.: 19 Bold Street, Southport.

ANTHONY DOUGLAS & COMPANY, LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of chemists, druggists, etc. Miss Elsie E. Ware, 47 Longbeach Road, S.W.11, director.

JOHN M. GRAY, LTD. (P.C.).—Registered in Belfast. Capital £100. Objects: To carry on the business of pharmaceutical chemists, etc. R.O.: 37 Main Street, Bangor, co. Down.

PHARMAKON, LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of chemists and druggists, dentists, opticians, etc. R.O.: Harp Works, North Circular Road, N.W.2.

J. CARROLL CULBERT, LTD. (P.C.).—Registered in Belfast. Capital £2,000. Objects: To acquire the business of a chemist now carried on by John C. Culbert at 2 Hollywood Road, Belfast.

SEP. WOOD & CO., LTD. (P.C.).—Capital £800. Objects: To carry on the business of manufacturers of and dealers in chemicals, drugs, medicines, etc. R.O.: 174 Chestnut Grove, New Earswick, York.

FEEDALL PRODUCTS, LTD. (P.C.).—Capital £2,000. Objects: To acquire the business of a manufacturer of dog foods and medicines carried on by Wm. G. Squires at College Farm, Amphill Road, Bedford.

ARTHUR MILLS (CHEMISTS), LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of pharmaceutical chemists, drug merchants, etc. Reginald A. Beck, 26 Northiam Road, Eastbourne, director.

W. & R. HATRICK, LTD. (P.C.).—Registered in Edinburgh. Capital £50,000. Objects: To acquire the business of W. & R. Hatrick & Co., manufacturing chemists and wholesale druggists, 152-170 Renfield Street, Glasgow.

HEALTHWAYS, LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of makers of and wholesale and retail dealers in herbal pillows and herbal and chemical preparations, etc. Solicitors: McKenna & Co., 31/4 Basinghall Street, E.C.2.

MICHAEL HART & CO., LTD. (P.C.).—Capital £6,000. Objects: To adopt an agreement with H. G. Hart and to manufacture and sell the medical tablets referred to therein and other medical preparations or appliances, etc. R.O.: 21 Cavendish Square, W.1.

DOMES DRUG STORES, LTD. (P.C.).—Capital £500. Objects: To adopt an agreement with Michael Collett for the purpose of acquiring the business of a chemist and druggist carried on by him at 6A Dome Buildings, Richmond, and at 433 Richmond Road, Twickenham.

THE LINCOLNSHIRE CHEMICAL CO., LTD. (P.C.).—Capital £15,000. Objects: To carry on the business of distilling and rectifying crude benzole, manufacturers of and dealers in tar, pitch, ammoniacal liquor and other residual products, etc. Solicitors: Pinsert & Co., Birmingham.

LUMINOS, LTD. (P.C.).—Capital £100. Objects: To carry on the business of importers, exporters and manufacturers of and dealers in cameras and accessories, photographic materials, etc. The first directors are: O. Schiff and L. W. Moritz, of 3 Newlands Avenue, Thames Ditton, Surrey.

MIDDLETON'S CONSOLIDATED HERBALISTS, LTD. (P.C.).—Capital £1,000. Objects: To adopt an agreement with W. W. H. Middleton, and to carry on the business of medical herbalists, botanical and dietetic specialists, manufacturing chemists, etc. R.O.: 122-124 Canterbury Street, Gillingham, Kent.

PHOTOGRAPHICS SALES, LTD. (P.C.).—Capital £100. Objects: To carry on business as manufacturers, exporters and importers of photographic dry plates, celluloid and paper films, papers, cameras and other apparatus, photographic and other chemical goods and accessories, etc. R.O.: 123 Cannon Street, E.C.

RHEUMATAPAK (TRENČANSKE TEPLICE SPA CZECHOSLOVAKIA), LTD. (P.C.).—Capital £200. Objects: To register or otherwise acquire the trade mark "Rheumatapak" and to carry on the business of manufacturers of preparations particularly for the relief of rheumatism and allied ailments, etc. Solicitor: F. P. Woodcock, Gresham House, 24 Old Broad Street, E.C.

E. C. D., LTD. (P.C.).—Capital £30,000. Objects: To acquire the whole or any part of the undertaking, business and assets of the Electro Chemical Development Syndicate, Ltd.; to develop electrolytic apparatus for the production of sodium hypochlorite or any other chemicals, apparatus and inventions for electrolysis injecting or dosing or any other treatment of and obtaining by-products from or by use of sea and brine water or any other liquids or chemicals, chlorinating processes, etc. R.O.: Town Mills, Tonbridge, Kent.

EUCRYL, LTD.—The directors have again decided to advance the payment of dividends for the year ending December 31, 1934, and have declared dividends of 5 per cent. on the preferred ordinary shares and 7½ per cent. on the deferred ordinary shares, making, with the interim dividend paid on July 1, a total for the year of 10 per cent. on the preferred and 12½ per cent. on the deferred shares, being the same as for the previous two years.

Insurance Act Dispensing

Record of matters concerning Chemists' interests in the National Health Insurance Acts.

Local Reports

Bury.—At the annual meeting of the Bury (Lancs) Insurance Committee it was reported that during the year only one test sample called for attention, and the recommendation of the Committee was accepted by the Ministry of Health. The number of prescriptions issued was 149,077, and the average cost was 8.1d.

Chester.—The annual meeting of the Chester Insurance Committee was held on November 29. It was stated that for last year the total number of prescriptions issued was 63,479, an increase on the previous year of 4,353. During the year several prescriptions were obtained in accordance with the testing scheme. Thirteen visits were made, ten for drugs and three for appliances. Two cases were referred to the Pharmaceutical Service Subcommittee for investigation, and in one case—that of an appliance—it was considered that no action was necessary, while in the other case a fine of £1 was imposed.

Derbyshire.—At the annual meeting of the Derbyshire Insurance Committee, Mr. H. G. Toy (Derby), one of the chemists' representatives, was elected as vice-chairman. The annual report stated that there were 183 chemists (representing 246 shops) under agreement, a decrease of one chemist but an increase of nine shops during the year. The chemists had been paid £10,566 14s. for drugs and appliances and £11,793 12s. for dispensing fees in respect of 731,112 prescriptions, the average cost of which was 7.7d. Under the testing scheme fifty-seven samples of medicines were procured, of which forty-eight were accepted on the analyst's certificate. In six of the nine cases in which there were discrepancies the chemists had been warned that correct dispensing would be looked for, and in each of the remaining three a fine of £1 is. was imposed. In four instances the mixtures were prepared by unqualified assistants without the requisite oversight, and the chemists were accordingly warned. Fourteen out of fifteen samples of appliances conformed to the tariff requirements. In the other case the appliance was very rarely ordered and the stock was old. The chemist had now obtained up-to-date goods of this description.

Devon.—At a recent meeting of the Devon Pharmaceutical Committee, held at Exeter, Mr. P. F. Rowsell presiding, it was decided to advise all chemists that extract of malt and extract of malt and oil should be supplied in cartons and not in bottles, unless the bottles are charged for and the charge refunded on return.

Middlesex.—The November meeting of the Middlesex Pharmaceutical Committee was held on November 21, Mr. C. E. Goode in the chair. A report was given by the secretary (Mr. Hugo Wolff) on the testing of medicines in the county, which showed that dispensing during the period had been well done. The report from the checking bureau showed that the high standard in accurate pricing had been maintained. The statistical data for the preceding months gave the increase in the number of prescriptions as over 5,000, due mostly to the great increase of insured persons in the county. There are now 659,718 insured persons against 626,959 at the same period last year. In spite of this increase it was recorded that the average cost had remained at the same figure as last year. Though there was more money coming into the county through the increased number of insured persons, it was felt that the remunerative value was still too low.—A question whether Casec and Laitproto were, in a given case, drugs forming part of medical benefit has been reported upon by the referees to whom it was sent. It is stated that these preparations were prescribed for a patient suffering from idiopathic steatorrhoea with tetany, on the advice of a specialist, after efforts had unsuccessfully been made to enable the patient to assimilate calcium in other forms.

When the use of Casec was discontinued the symptoms of tetany returned, and on its resumption were ameliorated. Laitproto was at one time substituted for Casec; the patient, however, was unable to retain it. The composition of Casec is stated to be protein, 88 per cent.; moisture, 5.5 per cent.; ash, 4.5 per cent.; fat, 2 per cent. The ash is further subdivided into calcium oxide, 2.5 per cent., and phosphorus pentoxide, 1.4 per cent., the calcium representing 1.8 per cent. and the phosphorus 0.6 per cent. The composition of Laitproto is stated to be protein, 92 per cent.; fat, 0.75 per cent.; and ash, 7.25 per cent. The ash is stated to contain phosphate of calcium, sodium and potassium. The report continues:—"Having regard to the quantities in which the substances were used, we feel satisfied that the nutritional purpose and effect of them were secondary only. The fact that the makers speak of these substances as foods does not affect our judgment, because we have conceded that, as usually ordered for infant feeding, their function is primarily nutritional. . . . In the circumstances of this case Casec and Laitproto were drugs forming part of medical benefit."

St. Helens.—It is reported by St. Helens Insurance Committee that during the past year £5,446 was paid to chemists in respect of 183,617 prescriptions. The nineteen chemists in St. Helens received an average of £285, as follows:—Twelve received less than £300, three between £300 and £500, three between £500 and £700, and one between £700 and £900.

West Riding.—At a meeting of the West Riding Insurance Committee on November 15 the Pharmaceutical Service Subcommittee recommended that four chemists be fined £2, £1, £10 and £1 respectively, for having had unqualified assistants in charge of their shops. It was stated that the four chemists had not carried out the contract they had made with the Insurance Committee. During the past few months several complaints had been received by the Pharmaceutical Service Subcommittee, who considered the time had arrived for action to be taken. It was not right for any chemist to leave his shop for any length of time without a qualified man in charge. The recommendations were agreed to.

Ideas for Displays

ONE method of creating sales is by suggesting immediate purchase. A chemist wishing to increase the sales of his own special cough candy used a large jar of the latter in his window, at the top of which appeared in large letters: "Stop that Cough!" Another attracted much attention to a display of hot water bottles by depicting a lady lying cosily in bed, with an announcement: "Takes the shiver from the sheets!" Quite an excellent method of driving home the sales message. Another sales-creating idea was to display in the shop window a number of specialties useful for winter ailments, using a window bill:

"Got a cold?
Here are some splendid remedies
for the most common colds—
keep one handy!"

A red cloth lined the bottom of the window, on which these specialties were displayed, each with its appropriate ticket showing complaint, remedy suggested, and price, thus:—

1. Sore Throat	...	Throat tablets	... 0/6
2. Cold in head	...	Nasal balm	... 1/0
3. Hoarseness	...	Bronchial lozenges	1/0
4. Bad cough	...	Cough cure	... 1/3
5. Cold on chest	...	Rubbing ointment	... 1/3
6. Influenza	...	Anti-flu cure	... 1/3

This window show not only attracted attention, but encouraged the shopper to step inside and buy.—F. M. V. (10/10).

FREE GIFT SCHEMES have been strongly condemned by Bolton Chamber of Trade.

Notes on the Poisons List and Rules

Abstract of an address delivered at a meeting of the Glasgow and South-Western Scottish Branch of the Pharmaceutical Society, on November 28, by Mr. J. Rutherford Hill, Ph.C.

THE Poisons List replaces the Poisons Schedule under the 1868 and 1908 Acts, while the Regulations replace the provisions included in these Acts. This is an example of the modern method of Parliamentary procedure. A skeleton Act is passed, and a Minister of the Crown or a State Department clothes the skeleton with specific rules or regulations over which Parliament has no adequate control. In framing the List and Rules the Poisons Board are restricted by the provisions of the Pharmacy and Poisons Act, 1933. There is an important Section, however (Sec. 23), which says the Home Secretary may dispense with or relax any of the provisions relating to poisons. That is a power so wide as practically to give authority to alter what has been enacted by Parliament.

There are strong reasons why an attempt should be made to find some way of simplifying the scheme so as to combine features which at present are stated separately. The draft Poisons List is an excellent scientific classification of substances which should be included in the Poisons List, and the Rules are a carefully thought out scheme, in very precise and technically accurate legal phraseology, of the conditions designed to secure public safety and effective official control as provided for in the Act. But for practical guidance of the ordinary citizen who is expected to conform to the law they are far too vague, abstruse and involved. This is practically admitted in the statement that a list of substances included in the Poisons List will be issued through the Stationery Office but will not have statutory authority as the Poisons List has. It is further stated that the pharmaceutical organisations will be issuing explanatory memoranda so that pharmacists may understand the Rules. Surely a Poisons List and Rules to be understood not only by pharmacists but by the general public should be in themselves clearly intelligible and should not need unofficial and non-statutory documents.

The Problem of Small Quantities

Much dubiety has been eliminated by the proviso that a reference to a substance shall include a reference to that substance when contained in any preparation, solution and so forth. There is a useful guiding statement in the United States Pharmacopœia. Reference is made to negligible quantities of an impurity in a drug, and it is explained that the word "negligible," when used in that Pharmacopœia, means a quantity not exceeding 0.0005 gram. Part I of the Poisons List remains much like the present Schedule, although some new substances of a similar kind have been added; but the scientific nomenclature is rather staggering. Definite rules for barbituric acid are not yet published. It seems probable, however, that these substances will be supplied only on medical prescription. It seems that a 50 per cent. mixture of colocynth or colocynth extract will be practically as poisonous as 100 per cent. Hydrochloric acid is listed in Part I, but dilutions containing less than 9 per cent. can be sold by any person. This means that the sale of spirit of salt will be limited to authorised sellers. It would seem that such an article as solution of iodine, if it is to be restricted at all, should be restricted to qualified vendors. The language used in listing phenols is highly complicated, vague, too scientific and far too comprehensive. It would be better to name the phenols which came up practically, and one might say that carbolic acid and cresols would almost meet the whole case. It is proposed that solutions of phenol just under 45 per cent. are to be sold by listed persons who may be without any knowledge of the highly toxic nature of the preparation. If this is to be allowed, there is no logical reason why unqualified

persons should not equally be allowed to sell lysol. This action by the Poisons Board is contrary to the recommendation of the Departmental Committee and to the intention of Section 17 (3) of the Act, which provides that articles in common use for the treatment of human ailments should be in Part I of the Poisons List. Arsenical and nicotine sheep dip and arsenical weed killer are in Part I, and can only be sold retail by authorised sellers. The supply of these poisons and others used for technical or industrial purposes is provided for under Section 20 of the Act. The draft List as it stands would put asthma powders, stramonium, belladonna plaster, corn plaster containing cannabis and areca nut in the category of First Schedule poisons.

The Storage of Poisons

With regard to the storage of poisons the specific requirements apply only to First Schedule poisons. The pharmacist is left with discretion as to the storage of other Part I poisons. On the whole the requirements are similar to and, indeed, simpler than the existing rules. The present rules as to labelling and containers will remain in force for twelve months after the Poisons List and Rules become operative. Probably also the rules will not be enforced till some months after they have been promulgated. The Second Schedule requires certain articles to be labelled with an indication of character. It has been said that in practice it might need as many as eight labels for the same article. It seems difficult to see why it should be necessary to say on a label what an article is to be used for. No matter what it has originally been intended to be used for, it can and will be used for any other purpose for which it is appropriate. Sections 18, 19 and 20, which specially affect pharmacists, should be printed on the front page so as to facilitate ready reference. There should also be a complete index. There ought to be a list of potent substances such as aspirin and phenacetin which, while not requiring to be labelled "Poison," should be distributed under the control of qualified pharmacists. Pharmacists should have more discretion in the use of "Poison" labels and compliance with other restrictions. The pharmacist is constantly engaged in supplying extemporaneously medicinal preparations in regard to which the use of a "Poison" label is not only unnecessary but to be strongly deprecated; and to have to go through all the details of Section 19 in all these cases would be an intolerable burden which should not be imposed. Acetanilide and phenazone in headache powders, and santalin in worm powders, though listed as poisons, should not require to be labelled "Poison." The placing of the percentage of poison in a preparation on an article made up and handed over the counter is an irksome requirement and does not seem to serve any useful purpose. Rule 26, which allows a doctor, dentist or veterinary surgeon to supply poison for medical, dental and animal treatment respectively should be more clearly defined so as to secure the provisions now applying under the Pharmacy Act Amendment Act, 1869. There should be some rule providing that the evil connected with the doctor's open shop with an unqualified person in charge should no longer be allowed. The exclusion of seeds dressed with mercuric chloride from the Poisons List seems a little dangerous. The Poisons List, when all is said and done, is not a very serious departure from familiar conditions. The Poisons List is not nearly so adverse to the qualified pharmacist as many people had feared it would be. However, poisons have been more trouble than they were worth since the burden was put upon us in 1868. We want the business or profession of the pharmacist properly defined.

THE PROGRESS OF PHARMACY AND ALLIED SCIENCES

PHARMACY

Danish Formulas.—The following preparations have been added to the formulary of the Danish Association of Pharmacists:—

TABLETTÆ PHENACETYL CUM CODEINO DAK.—

Phenacetin	...	...	250 gm.
Codeine phosphate	...	...	10 gm.
Magnesium oxide	...	...	35 gm.
Arrowroot, in powder	...	...	55 gm.
Alcohol (90 per cent.)	...	...	a sufficiency

Granulate the mass and dry the granules after passing through a sieve. Then add

Acetylsalicylic acid	...	...	250 gm.
Arrowroot, in powder	...	...	30 gm.
Talc	...	...	20 gm.

Divide into 1,000 tablets.

TROCHISCI BENZOCAINI.—BENZOCAINE PASTILLES.—

Benzocaine	...	...	100 gm.
Acacia, in powder	...	...	100 gm.
Sugar, in powder	...	...	739.5 gm.
Mucilage of tragacanth (2 per cent.)	...	...	75 gm.

Granulate the mixture by passing it through a sieve. When dry, moisten the granular powder with the following solution:—

Tincture of tolu (20 per cent.)	...	...	24 gm.
Oil of theobroma	...	...	5 gm.
Ether	...	...	100 gm.

Spread the mixture in a thin layer to allow the alcohol and ether to evaporate, then add

Talc	50 gm.
------	-----	-----	--------

Divide into 1,000 pastilles or tablets, each containing 0.1 gm. of benzocaine.

UNGVENTUM AMYCEN DAK.—

Ethyl <i>p</i> -oxybenzoate	...	...	50 gm.
Salicylic acid	...	...	30 gm.
Liquid paraffin	...	...	100 gm.
Lead oxide ointment	...	...	820 gm.

Vapor Mentholi Compositus.—The following formula for a compound menthol inhalant is given in "Archiv for Pharmaci og Chemi," October 27, 1934:—

Solution of formaldehyde	...	...	5 gm.
Oil of cajuput	...	...	5 gm.
Oil of pine	...	...	45 gm.
Eucalyptol	...	...	45 gm.
Menthol	...	...	270 gm.
Alcohol (90 per cent.)	...	...	630 gm.

London Hospital Pharmacopœia.—Formulas for the following preparations, *inter alia*, are included in the Pharmacopœia of the London Hospital, 1934:—

CAPSULA ETHYLIS IODIDI COMPOSITA.—

Chloroform	...	...	10 min.
Ethyl iodide	...	...	5 min.
Menthol	...	...	$\frac{1}{8}$ gr.

CREMOR HAMAMELIDIS.—

Solution of hamamelis (B.P. 1914)	...	...	60 min.
Yellow soft paraffin	...	...	120 gr.
Anhydrous wool fat	...	...	to 1 oz.

ELIXIR PARAFFINI.—

Alkanet root	...	...	30 gr.
Oil of lemon	...	...	3 min.
Oil of orange	...	...	3 min.
Liquid paraffin	...	...	to 1 pint

GOSSYPIUM CAPSICI.—

Capsicum	...	...	2 oz.
Alcohol (70 per cent.)	...	...	to 10 oz.

Make a tincture by percolation, then thoroughly impregnate 16 oz. of cotton-wool with 10 oz. thereof, express and dry.

LINCTUS TERP-HEROIN.—

Terpin hydrate	...	...	1 gr.
Diamorphine hydrochloride	...	...	$\frac{1}{20}$ gr.
Menthol	...	...	$\frac{1}{24}$ gr.
Alcohol (90 per cent.)	...	...	10 min.
Glycerin	...	...	to 60 min.

LIQUOR URÆÆ.—

Urea	...	...	15 gm.
Syrup of lemon	...	...	6 mls
Distilled water	...	...	to 50 mls

MISTURA PHENAZONI COMPOSITA.—

Phenazone	...	...	10 gr.
Aromatic spirit of ammonia	...	...	20 min.
Chloroform water	...	...	to $\frac{1}{2}$ oz.

MISTURA POTASSII CITRATIS COMPOSITA.—

Potassium citrate	...	...	30 gr.
Potassium bicarbonate	...	...	30 gr.
Heavy magnesium carbonate	...	...	20 gr.
Water	...	...	to $\frac{1}{2}$ oz.

MISTURA QUININÆ COMPOSITA.—BROADBENT'S MIXTURE.—

Ammoniated solution of quinine	...	...	1 dr.
Strong solution of ammonium acetate	...	...	15 min.
Camphorated tincture of opium	...	...	$\frac{1}{2}$ dr.
Ammonium carbonate	...	...	2 gr.
Tragacanth	...	...	$\frac{1}{2}$ gr.
Peppermint water	...	...	to $\frac{1}{2}$ oz.

MISTURA RHÆADOS COMPOSITA.—

Solution of morphine hydrochloride	...	...	30 min.
Syrup of red poppy (B.P. 1914)	...	...	1 dr.
Chloroform water	...	...	to $\frac{1}{2}$ oz.

MISTURA SODII SALICYLATIS ALKALINA.—

Sodium salicylate	...	...	10 gr.
Sodium bicarbonate	...	...	10 gr.
Syrup of ginger	...	...	$\frac{1}{2}$ dr.
Chloroform water	...	...	to $\frac{1}{2}$ oz.

MISTURA VALERIANÆ COMPOSITA.—

Potassium bromide	...	...	10 gr.
Aromatic spirit of ammonia	...	...	30 min.
Oil of cajuput	...	...	2 min.
Infusion of valerian	...	...	to $\frac{1}{2}$ oz.

PIGMENTUM GLUCOSI.—

Liquid glucose	...	...	2 dr.
Glycerin	...	...	to 1 oz.

TABELLA AMIDOPYRINÆ COMPOSITA.—

Amidopyrine	...	...	8 gr.
Acetylsalicylic acid	...	...	10 gr.
Diamorphine hydrochloride	...	...	$\frac{1}{8}$ gr.
Carmine	...	...	sufficient to colour pink

This dose to be prepared in two tablets.

TABELLA CALCII LACTATIS COMPOSITA.—

Calcium lactate	...	...	$7\frac{1}{2}$ gr.
Potassium citrate	...	...	10 gr.
Sodium bicarbonate	...	...	10 gr.

This dose to be prepared in four tablets.

THE PROGRESS OF PHARMACY AND ALLIED SCIENCES

VAPOR PINI COMPOSITUS.—

Weak solution of iodine	...	90 min.
Oil of eucalyptus	...	90 min.
Oil of pine	...	90 min.
Phenol	...	90 gr.
Creosote	...	30 min.
Menthol	...	20 gr.
Spirit of chloroform	...	15 min.
Spirit of ether	...	15 min.
Alcohol (90 per cent.)	...	to 1 oz.

Pectin as an Emulgent.—W. Brandrup ("Pharmazeutische Zentralhalle," July 5, 1934) recommends the use of pectin as an emulsifying agent for the preparation on a small scale of cod-liver oil emulsion, particularly since it does not require the use of an emulsifier. The emulgent consists of the following mixture:—

Pectin, in powder	...	10 grm.
Tragacanth, in powder	...	12 grm.
Acacia, in powder	...	16 grm.
Gelatin	...	7.8 grm.

In making the emulsion 18 grm. of the above emulgent is triturated with 100 grm. of water to produce a homogeneous paste. After standing for thirty minutes gradually add, with agitation, 400 grm. of boiling water; transfer the mixture to a capacious flask and add 400 grm. of cod-liver oil in five portions, shaking after each addition until an emulsion is produced. The two following solutions are then incorporated:—

I		
Calcium hypophosphite	...	6 grm.
Sodium hypophosphite	...	3 grm.
Saccharin	...	0.2 grm.
Water	...	a sufficiency
II		
Vanillin	...	0.1 grm.
Oil of peppermint	...	0.2 grm.
Benzaldehyde	...	0.2 grm.
Tincture of cinnamon	...	2 grm.
Nipagin M.	...	0.5 grm.
Alcohol (90 per cent.)	...	a sufficiency

The whole is then shaken until cold.

Margin of Error in Dispensing Suppositories.—

Manun J. Andrews ("Journal of the American Pharmaceutical Association," xiii, 10, p. 1003), in the third of a series of papers reporting the results of investigations made to determine what may be taken as the permissible margin of error in dispensing, deals with suppositories. The author's conclusions are as follows:—The weight of suppositories prepared by hand varies with the working temperature, the technique of the individual operator and the size and shape of the suppository to be prepared. The results of the first series of experiments show that 92 per cent. of a total of 1,000 different suppositories prepared by 100 different operators fall within twice the average standard deviation for weight of 0.344 gm. This corresponds to a variation of 17.2 per cent. when based upon the theoretical weight of 2 gm. The results of our experiments showed that there is no greater variation in length than in weight of suppositories made by hand if a definite length is decided upon. In ordinary practice, however, this is not true, as there is no official standard for length, and each pharmacist makes his own standard. Individual suppositories in a set of moulds do not vary in capacity beyond reasonable limits. There was observed, however, a great variation in the capacity of the sets of suppository moulds as used in different retail drug stores. The latter variation is believed to be due to the fact that the manufacturers of suppository moulds do not have any definite specifications to follow. A difference in the method of filling was observed to have an appreciable effect upon the capacities of suppository moulds.

PHARMACEUTICAL CHEMISTRY

Preparation of Arabinose.—H. C. Carrington, W. N. Haworth and E. L. Hirst ("Journal of the Chemical Society," November, 1934, 1653) have devised a useful

procedure for obtaining arabinose in improved yield from gum acacia. Kordofan gum acacia (100 gm.) dissolved in warm water (100 c.c.), after filtration through glass-wool, is acidified with dilute hydrochloric acid. The gum is then precipitated with methylated spirit (1 litre) added slowly with constant stirring. The precipitate is filtered off, and the process of dissolution and precipitation repeated three times. The yield of the arabic acid (dried at 50° C. in a vacuum oven) was 80 gm. Arabic acid (100 gm.) dissolved in 0.01 N-sulphuric acid (1 litre) is heated on a water bath for 14 hours at 95° C. After neutralising the solution by stirring in barium carbonate, the filtrate is added slowly, with stirring, to 2½ litres of alcohol. The precipitate is filtered off and the filtrate evaporated to a syrup under reduced pressure at 40° C. The syrup is crystallised almost completely within a week after nucleation with a crystal of arabinose. Purification is effected by trituration with alcohol. Recrystallisation from aqueous alcohol gives pure arabinose as a snow-white product, m.p. 157° C. (yield 18 gm.).

Solubility of Calcium Hydroxide.—H. Bassett ("Journal of the Chemical Society," September, 1934, 1270) finds that the increased solubility of fine particles is the main source of uncertainty in previous determinations of the solubility of calcium hydroxide. No evidence is apparent of the existence of either a hydrate of calcium hydroxide or of more than one crystalline form. The solubility of calcium oxalate in water is an important source of error in calcium determinations. The true solubilities of coarse calcium hydroxide are given as follows:—

Temperature Deg. C.	True Solubility (Gm. CaO per 100 gm. solution)
—0.088	0.100
0	0.130
10	0.125
19	0.118
30	0.109
40	0.100
50	0.0917
60.8	0.0818
70	—
81.7	0.0657
90	0.0591
99	0.0246

Finely divided freshly slaked lime gives values 10-15 per cent. higher than the above, and these diminish at a rate depending upon (a) temperature, (b) relative proportion of solid hydroxide and solution, (c) shaking.

ANALYTICAL CHEMISTRY

Furoic Acid as Acidimetric Standard.—H. B. Kellogg and A. M. Kellogg ("Industrial and Engineering Chemistry," Analytical Edition, 6, 4, 251) show that furoic acid has a purity of 100 per cent. on titrations in comparison with benzoic acid and potassium phthalate. Furoic acid is easily obtained in a high state of purity (m.p. 131° C.) by resublimation of the technical product. Its chief advantage over benzoic acid is its solubility in water (which obviates the use of alcohol). Fairly high molecular weight and lack of appreciable hygroscopicity are other recommendations.

Cleaning Platinum Wire for Flame Tests.—W. G. Leighton ("Industrial and Engineering Chemistry," Analytical Edition, 6, 1, 84) points out the usefulness of potassium acid sulphate for removing persistent traces of colour (contaminating) material from platinum wire used for flame tests in qualitative analysis. When the wire acquires a deposit which is removed with difficulty by hydrochloric acid it can be cleaned by drawing the hot wire across a piece of potassium bisulphate and passing through the flame. A bead of potassium pyrosulphate forms and travels slowly along the wire, dissolving the contaminating compound. When cold, the

THE PROGRESS OF PHARMACY AND ALLIED SCIENCES

bead is easily dislodged and any small residue dissolves in water. The last traces are usually removed by a single moistening with concentrated hydrochloric acid. The cleaned wire does not impart any coloration to the flame.

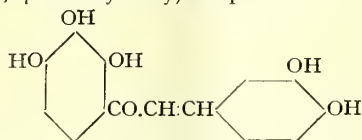
BIOLOGICAL CHEMISTRY

Human Daily Requirements of Ascorbic Acid.—

G. Göthlin ("Nature," 3389, 569) calculates (from the relation previously ascertained between the ascorbic acid requirements of man and guinea pig) that the smallest daily dose of ascorbic acid necessary to protect a person of 60 kilos. is from 19 to 27 mgm. Previous experience shows that a human adult (60 kilos.) requires a daily dose of orange juice fourteen to twenty times that required for a guinea pig ($\frac{1}{3}$ kilo.). The smallest dose of ascorbic acid insuring protection in the guinea pig against microscopical prescorbutic alterations in the molar teeth was found by biological tests to be 1.33 mgm.

INDUSTRIAL CHEMISTRY

Synthetic (Hemlock) Tannin.—A. Russell and J. Todd ("Journal of the Chemical Society," October, 1934, 1506) have accomplished the synthesis of *bis*-(7 ; 8 ; 3' ; 4'-tetrahydroxy) flavpinacol:—



The solubilities and properties of the synthetic product are practically identical with those of natural hemlock tannin. Hemlock extracts are extensively used for tanning purposes in America, and the synthetic product is absorbed quantitatively with hemlock tannin by hide powder.

Action of Alcoholic Solutions on Glass Containers.—

H. S. Y. Gill and W. E. S. Turner, at a meeting of the Society of Glass Technology in Leeds on November 21 ("Chemistry and Industry," 53, 49, 1044), gave the results of tests of the effects of alcohol-water mixtures upon glass bottles at 30° and 60° C. It was found that extraction of alkali from the glass of the container took place more readily with 40-60-per-cent. strengths of alcohol. The flakes which form are highly siliceous, and though these vary in form and texture to the naked eye they do not differ micrographically. The rate of extraction of alkali decreases with rise in alcoholic strength in all makes of bottles examined. Bottles stored for ten months have apparently a greater tendency to flaking than new bottles.

PURE CHEMISTRY AND PHYSICS

Basic Ferric Ammonium Sulphate.—A new basic ferric ammonium sulphate has been made (R. Jirkovsky, "Coll. Czech. Chem. Communications," 1934, 6, 445) by slow oxidation of a normal solution of Mohr's salt (ferrous ammonium sulphate). In about a year half the iron had oxidised and separated as a sulphur yellow micro-crystalline precipitate to which the formula $(\text{NH}_4)_2\text{O} \cdot 3\text{Fe}_2\text{O}_3 \cdot 4\text{SO}_3 \cdot 6\text{H}_2\text{O}$ or $(\text{NH}_4)_2\text{Fe}_3(\text{OH})_4(\text{SO}_4)_2$ may be assigned from the analytical data. The salt is very sparingly soluble even in boiling water. Dilute acids have little action upon it, but *aqua regia*, hot concentrated nitric acid and concentrated hydrochloric acid dissolve it fairly readily. It is decomposed by strong caustic alkali solutions. When heated in an electric oven it gradually changed in colour from yellow through orange, brown and red to dark carmine. Water of crystallisation began to come off at 220° C. and ammonia was evolved at about 300° C. Above 400° C. the residue lost sulphur trioxide, and at 900° C. only ferric oxide remained. The salt is evidently

analogous with the naturally occurring basic ferric sodium sulphate (natro-jarosite), which is found to lose water similarly (between 220° and 400°), leaving the substance $\text{Na}_2\text{O} \cdot 3\text{Fe}_2\text{O}_3 \cdot \text{SO}_4$. Basic ferric ammonium sulphate is reported to occur as an isomorphic admixture with the sodium compound in natro-jarosite.

ESSENTIAL OILS

Florida Tangerine Oil.—According to E. K. Nelson ("American Perfumer," 1934, 29, 347), tangerine oil expressed from the peel of the oranges grown in Florida (*Citrus nobilis deliciosa*) has specific gravity 0.8493 at 20°; optical rotation +92.5°; and refractive index 1.4762. It contains over 95 per cent. of limonene, and small amounts of octyl and decyl aldehydes, linalol, citral, citronellol and sesquiterpenes. Esters were present in very small quantities. Methyl anthranilate, which was found in Sicilian essential oil of tangerine by E. J. Parry, was not found in the Florida oil.

The Leaf Oil of Abies Nobilis.—Lynn and Nakaya ("Schimmel's Bericht," 1934) have obtained 0.3 per cent. of essential oil from the leaves of *Abies nobilis*, a Washington conifer. It is a greenish-yellow oil, of lemon-like odour, having the following characters:—

Specific gravity at 20°	= 0.8552
Optical rotation ...	= +3.89°
Refractive index at 30°	= 1.4780
Acid value ...	= 2.61
Ester value ...	= 1.12

The oil contains about 78 per cent. of terpenes, of which about half is *l*-phellandrene, and the remainder a mixture of α - and β -pinene. Camphene is also probably present. Sesquiterpenes, phenolic bodies, esters, aldehydes and ketones are also present.

Terpeneless Orange Oil from French Guinea.—

A good deal of orange oil is now produced in French Guinea, and samples have been found which are definitely lower in aldehydes than Sicilian orange oils. In view of the fact that L. Trabaud ("Revue des Marques de la Parfumerie et de la Savonnerie," 1934, 12, 60) gives the following account of the terpeneless oil, it is interesting to ask what becomes of the orange terpenes produced in New Guinea. According to Trabaud the terpeneless and sesquiterpeneless oils of Guinea origin are especially high in aldehydes (mainly decyl, with small amounts of octyl and nonyl), containing approximately 1.5 times as much as Sicilian oils. The terpeneless oil has a specific gravity 0.8793-0.8875, optical rotation +22.4° to +25.5° and aldehydes (as citral) 27 to 28 per cent.

Kenya Peppermint Oil.—

Several samples of Kenya peppermint oil have been examined at the Imperial Institute ("Bulletin," 2, 1934). These were obtained from plants grown at Ngong, Kipipiri, and Molo. The following results were obtained:—

	Ngong 1	Ngong 2	Kipipiri	Molo
S.G. ...	0.9219	0.9282	0.9415	0.9089
Rotation ...	-25.38°	-12.16°	-24.53°	-36.36°
Refractive index	1.4606	1.4642	1.4627	1.4606
Acid value ...	1.5	2.1	5.0	0.3
Ester value ...	75.1	72.6	147.4	47.2
Esters per cent. ...	26.6	25.7	52.1	16.7
Total menthol ...	65.8	62.8	81.2	77.0

The Ngong oil had an unpleasant pennyroyal odour, whilst that from Molo more nearly resembled ordinary peppermint oil, but its odour is coarse and strong.

Essential Oil of Turmeric.—

Kelkav and Rao ("Journal of the Indian Institute of Science," 1934, 17A, 7-24) have examined the essential oil obtained by steam distillation from the crushed rhizomes of *Curcuma longa*. The oil had an optical rotation -17.3°, and contained 58 per cent. of ketones. There were identified in the oil the following constituents:—Valerianic and hexoic acids; a valerianic ester; *d*-phellandrene; *d*-sabinene; borneol; zingiberene; and a tertiary alcohol or mixture of

THE PROGRESS OF PHARMACY AND ALLIED SCIENCES

alcohols, of the formula $C_{15}H_{22}O$ or $C_{15}H_{22}O$. This boiled at 108° – 110° at 3 mm. pressure, and had a specific rotation -14.6° . Curcumone was the principal constituent of the ketone mixture, which was present to the extent of over 50 per cent.

American Turpentine Oil.—The essential oil obtained from *Pinus monticola*, the Western white pine, a tree growing in the Warner Mountains in California, has been examined by Foote and Mirov ("Journal of the American Pharmaceutical Association," 22, 826). The oleo-resin which exudes from the tree yields 18 per cent. of turpentine oil having the following characters:—

Specific gravity at 20°	= 0.8691
Optical rotation	= $+20.59^{\circ}$
Refractive index at 23°	= 1.4646

The oil contains about 60 per cent. of *d*- α -pinene, 26 per cent. of β -pinene; 1 to 2 per cent. of undecane; sesquiterpenes and limonene. Undecane is very rarely met with naturally, and has been found in the turpentine oil from *Pinus exelsa* and in Pennsylvanian petroleum.

East African Cananga Oils.—Worsley ("Bulletin of the Imperial Institute," 2, 1934) reports on the essential oil from the flowers of *Cananga odorata*, from trees planted by former German colonists at Sigi, three miles from Amani. Forty-one kilos of the fresh flowers were distilled and yielded 0.64 per cent. of first grade and 0.32 per cent. of second grade oil, the two grades being separated by changing the receiver when about two-thirds of the oil had distilled. The figures for these oils, compared with those of a previous sample from Amani, are as follows:—

	1st Grade	2nd Grade	Previous Oil.
S.G. ...	0.9384	0.9414	0.9329
Refractive index ...	1.4855	1.4965	1.4845
Optical rotation ...	-15°	-33.5°	-17.1°
Acid value ...	0.3	0.2	1.1
Ester value ...	147.3	141.3	136.3

It is thought that the amount of first grade oil might have been increased to nearly 80 per cent. of the total, but the separation was effected at 66 per cent. in order to be on the safe side.

East African Ocimum Oils.—The Imperial Institute reports ("Bulletin," xxxii, 2, 1934) on a number of specimens of ocimum oil. Two samples distilled from an indigenous species in Uganda, known locally as *Mujaja omunene*, were found to have the following characters:—

	(1)	(2)
S.g. at 15.5° ...	0.9117	0.8955
Rotation ...	-20.21°	-4.25°
Refractive index ...	1.5040	1.4941
Acid value ...	—	1.1
Aldehydes and ketones ...	—	1 p.c.
Phenols ...	24 p.c.	26.5 p.c.

In the case of sample No. 1, the odour indicated the presence of eugenol in the phenolic portion of the oil, whilst the non-phenolic portion appeared to consist mostly of terpene. The oil appears to be a very fine oil of the thyme oil character. The oil from *Ocimum menthaefolium* from Uganda had a specific gravity 0.912, optical rotation $+13.5^{\circ}$, and refractive index 1.4763. It has an odour of sweet hazel oil, and appears to contain anethole and methylchaniol. An oil was distilled from *Ocimum Americanum*, from Nyasaland, which had the following characters:—S.g., 0.9219; optical rotation, $+45.08^{\circ}$; refractive index, 1.4715; acid value, 0.6; ester value, 0; ester value (after acetylation), 15.5.

African Geranium Oils.—A number of East African geranium oils are reported on by the Imperial Institute ("Bulletin," xxxii, 2, 1934), and some are also dealt with in an article by Dr. Worsley (*ibid*). From Kenya oils distilled from species of *Pelargonium*, known as Nyeta and Mawah have been received, and also two

types, termed "S.A." and "Q." of *Pelargonium radula* (rosea). These oils had the following characters:—

	Nyeta	Mawah	"S.A."	"Q."
S.G. ...	0.872	0.892	0.9055	0.9008
Rotation ...	-0.06°	-18.47°	-9.17°	-9.28°
Refractive index	1.4615	1.4700	1.4721	1.4705
Acid value ...	1.9	5.8	7.3	6.3
Ester value ...	17.1	22.0	71.8	63.4
Total esters ...	7.2%	9.3%	30.3%	26.7%
Total alcohols ...	81.4%	66.9%	—	—

The nyeta and mawah oils contain far less esters than normal geranium oils, whilst those for *P. radula* are more normal in ester content. Two oils distilled from the leaves of *P. capitatum* in Tanganyika were examined, and here again the esters were very low—being only 5.6 per cent. and 5.2 per cent. in the two samples, calculated as geranyl tiglate. A sample distilled from *P. radula* in Uganda was found to contain only 9.5 per cent. of esters and 70.2 per cent. of total geraniols. According to Dr. Worsley two samples, obtained from *P. capitatum* and a variety thereof in Amani, had the following characters:—

	<i>P. capitatum</i> var.	<i>P. capitatum</i> (after 24 hours)	<i>P. capitatum</i>
S.G. ...	0.888	0.8948	0.8952
Refractive index ...	1.4578	1.4705	1.4695
Rotation ...	-30.7°	-8.95°	-9.7°
Acid value ...	7.9	15.2	8.1
Ester value ...	12.4	13.2	15.1

Here again the ester values take these oils out of the category of normal geranium oils.

MEDICINE

Therapeutic Uses of Glucose.—In a brief paper in "The Lancet" (5801, 1006) E. C. Warner reviews the therapeutic indications for the administration of glucose. These are:—Conditions associated with ketosis; those associated with liver disease; allergic conditions; deficiency in weight; acute forms of heart disease. The author points out that glucose can be given by almost any route, and that large doses are usually well tolerated.

Treatment of Trichophyton Infection.—J. Hasson writes ("British Medical Journal," 3854, 928):—"I see about four to five cases weekly of epidermophytosis, and all the classical treatments carried out were a failure in my hands. Most physicians overlook the fact that the disease nests on the nails, and if one treats the palms of the hands and soles of the feet only the disease certainly relapses. The best method is the carbol-fuchsin paint, to which I add 2.5 per cent. of salicylic acid. Rub the nails thoroughly with the paint twice daily, even after the disease seems to have subsided. Three months' treatment is, in my opinion, a fair period for a rapid cure."

Quinine Lactate Solution for Varicose Veins.—J. W. Riddoch, after reviewing the merits of various sclerosing solutions used for varicose veins ("Lancet," 5803, 1101), reports favourably on the use of quinine lactate. This salt has been employed in 10 per cent., 15 per cent., and saturated (16.6 per cent.) solutions. Since January 1934 the author has used it on 170 new hospital patients apart from giving it to others whose treatment had been started with the hydrochloride, and to private patients. The efficiency of quinine lactate as an antiseptic was tested by F. Smith in the usual way, by its bactericidal action upon streptococci and *B. coli*. It was found that non-haemolytic streptococci are prevented from growing in bouillon containing 0.5 per cent. and *B. coli* in bouillon containing 0.85 per cent. of quinine lactate. The same cultures were tested with carbolic acid and this was found to have a bactericidal power only five times that of quinine lactate.

Treatment of Hæmoptysis.—In a note on the pathology and treatment of hæmoptysis ("British Medical Journal," 3851, 762), H. V. Morlock and A. J. S.

THE PROGRESS OF PHARMACY AND ALLIED SCIENCES

Pinchin point out the danger of definitely abolishing the cough reflex. They are favourably impressed with intravenous injection of Congo red. For an adult the dose usually given is 10 c.c. of a 1-per-cent. solution. This dose is often followed by a definite rigor of short duration which never gives cause for alarm. It has been found that smaller doses may succeed in checking the hæmorrhage temporarily but are not as successful in obtaining complete stasis as is the full 10 c.c. dose. The authors have found that occasionally the 10 c.c. will check the hæmorrhage for some time, and then slight recurrence occurs. In such cases the dose may be repeated, a further 10 c.c. being given in from four to six hours.

Removing Tattoo Marks.—Professor Bruck ("Pharmazeutische Zeitung," June 9, 1934) reports that the following procedure for the removal of tattoo marks has been used with excellent results; however, in view of the possibility of complications, the method should only be applied under the direction of a medical practitioner. The skin surrounding the tattoo marks is covered with a thick layer of zinc paste. A piece of Billroth's cambric, the size of the tattooed region, spread with the following recently prepared cream

Pyrogallie acid,			
Salicylic acid,			
Resorcin ...	...	...of each	7 grm.
Glycerin,			
Alcohol (70 per cent.)	...	...of each	5 grm.
Tragacanth ...	...	...	1 grm.

is applied in such a way that its edge rests on the layer of zinc paste. The whole is covered with a few layers of gauze and held in place by means of an elastoplast bandage. Care must be taken to ensure that the coated piece of Billroth's cambric does not slip. After twenty-four hours the bandage is taken off, whereupon the epidermis may be easily removed. Another application as described above is then made, which is allowed to remain in place for forty-eight hours, at the end of which, in most instances, the whole of the tattooed area will be found to have become necrotic. This is treated by the daily application of Desitin paste dressings until healthy granulation occurs. In view of the painful nature of this treatment Bruck deems it advisable to confine the application of the caustic cream to small areas at a time.

Cyclopropane Anæsthesia.—R. W. Waters and E. R. Schmidt contribute to "The Journal of the American Medical Association" (103, 13, 975) a study of 2,600 clinical administrations of cyclopropane (CH_2 , CH_2 , CH_2), alone or with other gases. In the course of an eight-page monograph they report that cyclopropane is capable of exploding when mixed with oxygen in concentration as low as 3.8 per cent. Full details of the technique of administration are given, together with laboratory studies. The end-results in various types of operation are discussed. The authors remark that the possibility of obtunding the sensation of pain by means of cyclopropane, without loss of consciousness, warrants further study. For anæsthesia it is replacing ethylene and ether to a considerable extent; and when ether is used, cyclopropane is preferred to nitrous oxide as the inducing agent. The authors conclude, however, with the observation that the careful individual attention of a skilled anæsthetist is more important than the agent used.—A study in a smaller field, by W. S. Sykes ("British Medical Journal," 3854, 901), results in another favourable opinion of cyclopropane as an anæsthetic. The author expresses the view that cyclopropane appears to be a most promising anæsthetic, and it may possibly fulfil the hitherto unattained ideal of the safety and speed of nitrous oxide combined with the calm and quiet relaxation of chloroform. The gas causes little, if any, change in the blood pressure or blood chemistry, and it possesses the desirable feature which makes ether so popular—that is, in cases of overdosage the respiration

fails before the heart. Animal experiment shows that cyclopropane anæsthesia mishandled by cessation of the oxygen supply can be taken to the stage of profound asphyxia and complete stoppage of respiration, which may be allowed to continue for six minutes before any effect is shown on the electrocardiograph tracings. If the administration is then stopped, rapid and spontaneous recovery takes place.

Treatment of Influenza.—In an article in "The British Medical Journal" (3857, 1059) Lord Horder reviews the treatment of influenza. Specific measures of inoculation, or of passive immunisation, are not as yet available; the author gives a formula, however, for a vaccine for use in secondary infections. Directions for the general management of the patient, ventilation of room and so forth are given. The diet should be restricted to warm liquids, given every two hours by day and every four hours by night if the patient is awake. The total intake of liquid should not be less than four pints in twenty-four hours. The drinking of plain water, cold if preferred, is to be encouraged. "Feeding up" is to be deprecated. In most cases alcohol is unnecessary. The bowels are opened by a double dose of the patient's customary aperient; if there is none, calomel in $\frac{1}{4}$ gr. doses hourly for four or six doses, and followed by a saline draught. Aspirin and Dover's powder, given in doses of 5 gr. of each and repeated at intervals of six hours, for four to six doses, help to control the fever and allay the headache and general discomfort. Alternatives are ammoniated tincture of quinine in $\frac{1}{2}$ -oz. doses or salicin in 20-gr. doses, at the same intervals. If the headache is severe and is not relieved by these measures, a mixture of phenacetin, caffeine and antipyrine, 3 gr. of each, every three hours for four doses. In the case of all drugs a draught or a powder should be ordered, not tablets. When gastric symptoms are troublesome a mixture of sod. bicarb., sod. sulphocarb. and bismuth oxycarb., 5 gr. of each, with glycerin of carbolic acid to minims, in peppermint water, may be ordered four- or six-hourly. In the majority of severe cases respiratory symptoms are present. Treatment is then as for acute bronchitis (and is given in detail by the author). Sleeplessness calls for a revision of the general measures. (Three methods of treatment are given, with the comment that the barbiturates are better avoided.) If heart failure threatens, brandy in $\frac{1}{2}$ -oz. doses every four hours, supplemented by strychnine gr. $\frac{1}{60}$ twice during the day and coramine 1 c.c. twice during the night, may be used. Convalescence must be watched with care in all cases. The virus of influenza does not attack only, or even chiefly, persons of low general resistance.

Treatment of Acute Bronchitis.—R. A. Young contributes to "The British Medical Journal" (3858, 1111) an article on the treatment of acute bronchitis. He recognises the following varieties:—(1) Inflammation of the larger bronchi, or more accurately tracheo-bronchitis; (2) bronchitis of the medium-sized tubes; (3) inflammation of the bronchioles; (4) suppurative bronchitis or "suffocative catarrh"; (5) fibrinous bronchitis. The author is not in favour of watery saline nasal douches in tracheo-bronchitis, but believes that solutions or suspensions of antiseptics and astringents in oil or liquid paraffin may be useful, such as adrenaline or chlorotone inhalant. In the "dry" stage the air of the room may be kept slightly moist by means of a steam kettle, placed well away from the patient. To each pint of water in the kettle five drops of oil of eucalyptus or terebene may be added, or some other volatile oil. The object is to moisten the air slightly, not to make the neighbourhood of the patient damp and misty. A moist inhalation is, however, sometimes soothing, and the time-honoured friar's balsam, one drachm to the pint of water at a temperature of 140° F. is often soothing. Even though there may be little fever, the diet in the dry stage should be largely fluid, and solid food, for

THE PROGRESS OF PHARMACY AND ALLIED SCIENCES

which as a rule the patient has little inclination, should be avoided. A hot or cold compress to the neck may be comforting. A mustard leaf over the sternum or rubbing in a liniment, such as linimentum terebinth. aceticum, may also be helpful. A preliminary purge is usually advised, such as calomel at night followed by a saline in the morning. In bronchitis of the medium-sized tubes a careful watch should be kept on the pulse and blood pressure. Acute suppurative bronchitis or suffocative catarrh, though rare, is grave, and is usually due to the pneumococcus. In general its manifestations are similar to those of bronchopneumonia, but cough with copious expectoration, marked dyspnoea, and extreme cyanosis develop very rapidly, while dangerous prostration is a very early feature. Fibrinous or plastic bronchitis, though rare, may easily be overlooked. In all cases with cough and sputum, especially where cough is violent and paroxysmal, and where there are signs of local collapse of the lung, the sputum should be poured into water in a large transparent glass vessel. In this condition characteristic tree-like casts may be recognised. The treatment is similar to that for severe bronchitis. Prescriptions of familiar types are given in the course of the article.

OPTICS

Irradiation Cataract.—J. G. Milner ("British Journal of Ophthalmology," September, 1934) states that exposure of the eyes to the effects of x -rays or radium is likely to result in the formation of cataract. This cataract has a typical appearance, its characteristics being the formation of vacuoles, cloudy areas, and later a plaque. It also has a constant situation—the posterior cortex of the lens. There is always a latent period between exposure and cataract formation, and this can be said to be at least two years. It may be many years. One course of deep x -rays is sufficient to cause cataract. Too few cases of cataract due to radium have been seen to dogmatise, but it may be said (1) that beta rays, applied at short intervals for short periods, are effective in treatment, and harmless to the lens; (2) that gamma radiation is likely to produce cataract. Protection of the eyes during treatment is impracticable, but efforts should be made to devise some method of screening the lens without jeopardising the effect of the radiation.

Superficial Corneal Opacities.—F. E. Preston ("Proceedings of the Royal Society of Medicine," October, 1934) cites the case of a girl aged fifteen with both corneae presenting lesions which were superficial and apparently solid. The elevations were white and were confined to the central parts of the corneae and had almost the appearance of tiny pieces of putty. Two months later the appearance had changed. Most of the putty-like elevations had disappeared, and there were innumerable spots all over the corneae with, apparently, a coalescence of the spots on the central portion of the right cornea, producing a haze, somewhat triangular in shape. The vision was $\frac{6}{24}$ with each eye and was not improved by glasses. Later he prescribed "halibut oil" and vision has improved to $\frac{6}{12}$; the corneal haze has almost disappeared.

PHARMACOLOGY

Toxicity of Barbiturates.—J. T. Gwathmey, in discussing the preoperative use of barbiturates ("Journal of the American Medical Association," 103, 20, 1536), cites a case of a nurse who took forty-three 4-gr. tablets of sodium ipral (the sodium salt of ethylisopropyl-barbituric acid), with recovery after routine treatment in hospital. He adds that three tablets (12 gr.) is the maximum dose as a basal induction anaesthetic, and quotes Bernard Fantus as stating that the fatal dose of the barbiturates is from "fifteen to thirty times the therapeutic dose."

Snake Venom as a Hæmodynamic.—In a first communication ("Lancet," 5801, 985), R. G. Macfarlane and B. Barnett give encouraging data regarding the

hæmodynamic possibilities of snake venom. So far as the authors are aware, its action on hæmophilic blood has not previously been studied. Their principal findings are:—(1) In patients with normal blood the venom has been used successfully some twenty times as a hæmodynamic application following dental extraction and tonsillectomy, and in two cases during abdominal operations to control capillary oozing. (2) The venom has been used with success to stop hæmorrhage following dental extraction in three subjects with a hæmorrhagic diathesis of which no definite diagnosis was made. (3) In genuine hæmophilic subjects it has been used most effectively following dental extractions (two cases), to control epistaxis (one case), and to control hæmorrhage from wounds (one case). In the cases of dental extraction an operation was deliberately performed which would have been considered highly dangerous in view of the patients' prolonged coagulation times in the absence of a hæmodynamic. In all these cases complete hæmostasis was secured almost immediately by the local application of sterile 1:10,000 venom solution. In none of them was there any ill effect attributable to its use.

Arsenic in the Keratin Tissues.—S. Smith and E. B. Hendry make a preliminary report ("British Medical Journal," 3849, 675) on the significance of the amounts of arsenic found in the hair and nails of the human body. They point out that various questions arising in the course of their investigation need further tests—e.g., certain results suggest that arsenic once deposited in hair or nails is finally lost to the body—a suggestion which is *a priori* indicated by the fact that hair shafts, the keratin layers of epidermis, and so on, are really dead tissues, and are, indeed, excretions. However, there appears to be a division of opinion on the subject. In addition to giving their findings the authors review the literature. Their summary of conclusions is as follows:—"It has been shown that keratin tissues when soaked in arsenical solution exhibit the phenomenon of preferential absorption. The arsenic so absorbed can be partly removed by very prolonged soaking in distilled water, but rapid rinsing either with water or dilute alkali does not affect the arsenic content in any marked degree. By this method the maximum arsenic content of hair is found to be 5 mgm. per 100 gm., and much higher values can be obtained in the case of nails. *In vitro* experiments have shown that arsenic can travel along a hair fibre only if 'creeping' of the solution along the outside of the hair be possible. It has been demonstrated that arsenic absorbed into hair *in vivo* cannot be removed by prolonged soaking, and this fact is tentatively put forward as a basis for a method of distinguishing between arsenic absorbed *in vivo* and arsenic resulting from external contamination."

Absorption of Gases while Bathing.—A. Mougeot and — Aubertot have investigated ("Archives of Medical Hydrology," 12, 3, 292) the physiological action of gases contained in thermal water on patients who bathe. To the theory that thermal baths only act on the surface of the skin and produce reflexes which affect circulation, respiration and nutrition is opposed the conception that gases are absorbed by the skin during bathing and enter immediately into the blood stream, where they act as hormones. With regard to carbon dioxide, it is difficult to explain, if this gas only acts by stimulating the skin, how it can at one and the same time slow the respiratory rhythm and the rate of the heart, augment pulmonary respiration and the contractions of the myocardium. If this be so, it must act on the vagus nerve to lower the pulse rate and the sympathetic to increase cardiac tonicity, and simultaneously increase central and peripheral vasodilatation and lower arterial extension. The theory advanced is that after absorption by the skin carbon dioxide is partly eliminated by the lungs, but that part remains in the circulating blood and is carried to the fourth ventricle, where it excites the respiratory centre and the centre regulating

THE PROGRESS OF PHARMACY AND ALLIED SCIENCES

cardiac action. Throughout the system it lowers capillary and arterial tone, and dilates the coronary vessels. It completes its action by increasing intracellular combustion, whereas hydrogen sulphide acts by augmenting intracellular oxidation and does not affect respiration or circulation. Further, it is suggested that carbon dioxide is a vector for the transmission of radio-activity, this being proportional to the radio-activity of the water. It is not claimed that the absorption of gases by the skin explains all the observed phenomena.

PHOTOGRAPHY

Compensation Development.—According to the "British Journal of Photography," December 7, Dr. F. Bürki, writing in the "Camera" (Lucerne) suggests the following formula as a "compensated" developer for cases of doubtful exposure:—

Pyro	...	...	...	29 gr.
Potassium metabisulphite,	10			
per cent. solution	...	...	5 dr.	
Caustic soda, 10 per cent. solution	...	...	...	3 dr. 20 M
Water	...	...	to	20 oz.

The proportions of the various constituents must be accurately measured. Time of development will be found to be five to six minutes at 65° F. The image is of a greenish-brown appearance, and though it has a "soft" look is of good printing value.

Tank Developer.—W. McWilliam ("British Journal of Photography," October 19), in writing on the subject of the "Mechanical Development of Negatives," states that a developer prepared as follows will remain good in a tank with a floating lid for four weeks if worked regularly, and up to three months if only rarely used:—

Metol	...	...	...	64 gr.
Hydroquinone	...	...	...	256 gr.
Pyro	...	...	...	256 gr.
Sodium sulphite anhyd.	...	...	8 oz.	
Sodium carb. anhyd.	...	...	3½ oz.	
Potassium bromide	...	...	32 gr.	
Water	...	...	...	200 oz.

When the bath is freshly made up, the developing time is about 2½ minutes, but it increases to 3½ minutes the next day. It remains constant after this for practically the whole of the working life of the bath. When the duration of development extends to over four minutes it is advisable to throw the whole bath away and make up a fresh one. If the temperature of the bath is found to be below 70° F., an aluminium flask filled with boiling water is immersed in it for a few minutes before starting work, so as to bring the temperature up to standard.

VETERINARY MEDICINE

Follicular Mange.—G. E. Woodrow ("Veterinary Journal," November 1934) considers that the lengthy and often unsatisfactory treatment of follicular mange and allied skin conditions is entirely due to secondary pyogenic infection. He deprecates the prolonged use of sulphur dressings as likely to aggravate the existing skin condition with a sulphur dermatitis. In the treatment of the secondary pyogenic phase he claims to have had the best results from non-specific protein therapy, and suggests the use of Antibacsyn in 2 c.c. doses at intervals of three days. He suggests in untreated cases a preliminary course covering eight days of sulphur dressings, to be followed by Antibacsyn injections during the next one to two weeks, with a final sulphur dressing to finish the treatment. Some case reports are added to illustrate the results of this treatment.

Acetylcholine.—F. T. Harvey ("Veterinary Record," October 13) cites six cases which he has treated with injections of acetylcholine with good results. He states

that as to dosage of acetylcholine for horses, nothing of course was known, but in man as much as 0.6 gm. has been given at a single injection in a severe case of ileus, but usually 0.19 is given hourly up to six doses or until the bowels act or flatus is expelled. Bottles containing about 30 grains of the substance in stable solution for hypodermic or intramuscular injections are available. He thinks 5 c.c. of this solution should be given and repeated at frequent intervals until borborygmi are established or relief obtained. Its effects can thus be watched, for experience indicates that even 5 c.c. may produce marked peristalsis, and that its effects are not altogether dependent on the quantity injected.

Nembutal Anaesthesia in the Dog.—J. G. Wright and M. Oyler ("Veterinary Record," December 8) state that the most rational and the safest method of inducing nembutal anaesthesia is by intravenous injection, and in the majority of dogs no difficulty will be experienced in administration. The rapidity with which general anaesthesia can be induced, even in very large subjects, and the entire absence of excitement during induction, make the method much superior to inhalation anaesthesia. The anaesthetisation of 132 routine surgical cases with only two deaths directly attributable to the agent is, it is considered, evidence that this is the safest form of anaesthesia in the dog. It is considered significant that, out of the four deaths which have occurred, using nembutal by all methods, three have been of the mouth-breathing type (Pekes and bulldogs). It is suggested that in these asphyxia may have been for the great part mechanical. It is advised that nembutal be not used in this type of dog. The doses in the 100 cases of which details are given ranged from 1.1 grain for a 7-lb. Pom. to 15 grains for a large Alsatian. The authors state that it is their practice to dissolve the drug in sterile water immediately prior to use, it being customary to employ a dilution of 1 grain to 1 c.c. When the doses have exceeded 10 grains, it has been their practice to increase the strength of the solution, making 10 c.c.s. the maximum bulk of the injection.

Nasal and Bronchial Catarrh.—G. Mayall ("Veterinary Journal," November 1934) points out that animals do not appear to be so subject to catarrh as human beings. He then describes six outbreaks of nasal and bronchial catarrh attacking on an average ten to twelve horses. In treating these cases he had loose boxes into which medicated steam (tincture of benzoin, eucalyptus, terebene) could be passed, and it is thought that this factor materially aided the recovery of some of the worst cases. But besides this, treatment has been with carbonate of ammonia, acetanilide, nux vomica and liquorice root as balls, and nitrate of potash and hyposulphite of soda in the drinking water, or as an electuary. Occasionally oil of cantharides has been applied to the sides and throat. The nostrils have been syringed out repeatedly with a 1 per cent. solution of ammonium chloride, and frequent insufflations have been given up the nostril, with a powder blower, of boric acid and iodoform. In some of the worst and lingering cases solvellæ of nasal eucalyptol co. dissolved in water have been used. Massage of the nostrils has also been beneficial. With this treatment there is no sequelæ of nasal gleet, or complications of strangles, nor any deaths, although many of the animals have been critically ill. Dogs and cats with catarrh have frequently benefited from the ammonium chloride treatment up the nostrils with an eye-dropper, and a good syringing of the throat with the same solution. Occasionally smearing the nose with vaseline mixed with camphor and eucalyptus oil seems to help. For the bronchial catarrh, elixir Kugloid co. (Huxley) is advocated. It contains beechwood creosote, quinine, eucalyptol and syrup glycerophosph. co.

Trade Notes

BEECHAMS PILLS, LTD., St. Helens, are utilising their advertising space in this issue to wish their customers a happy and successful New Year.

WRIGHT, LAYMAN & UMNEY (1932), LTD., Southwark Street, London, S.E.1, elsewhere in this issue express the wish that the forthcoming year may bring record business.

W. B. CARTWRIGHT, LTD., Rawdon, near Leeds, have undertaken the marketing of Dyanese dyes. All inquiries for these products should be addressed to Rawdon in future.

INVOICE FILE.—Thomas Guest, & Co., Ltd., Carruthers Street, Manchester, 4, inform us that the invoice file to which reference was made in the *C. & D.*, December 15, p. 726, will be sent to any retailer who writes for one, while the stock lasts.

AMONG the advertising pages of this issue there is a section in red and black on buff paper. The following are the manufacturers whose announcements are thus printed: Stafford Allen & Sons, Ltd.; Butler & Crispe; Lax & Shaw, Ltd.; Parkinsons, Ltd.; Potter & Clarke, Ltd.; W. J. Rendell, Ltd.; Trade Commissioner for Mysore; United Glass Bottle Manufacturers, Ltd.

MERCK SPECIALITIES.—E. Merck, chemical manufacturers, Darmstadt, are opening a new information and publicity bureau at 37-38 Golden Square, London, W.1 (Gerrard 5966), on January 1, 1935. We understand it is the firm's intention considerably to increase their publicity and advertising in 1935 to the English medical profession. General information regarding the Merck specialities will be sent to any pharmacist on request. Sales stocks, as before, will be held by H. R. Napp, Ltd., Clements Inn, Kingsway, London, W.C.2.

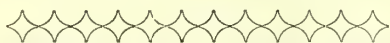
Trade-Mark Applications

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1934, p. 304.

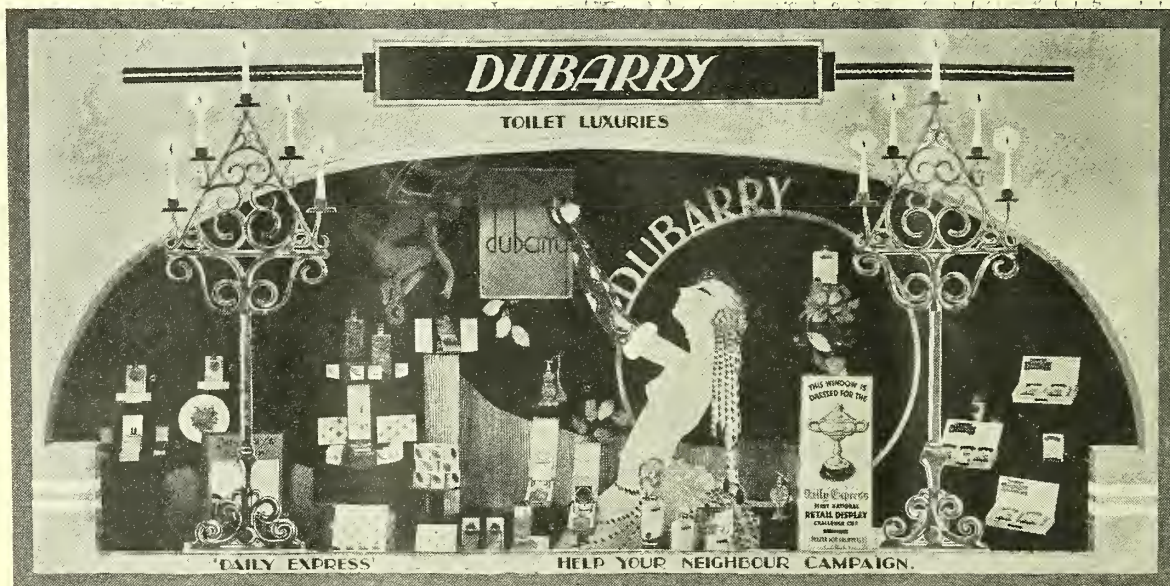
(From "The Trade Marks Journal," December 19, 1934.)

- "ELDRON" on diamond shaped design; for chemicals (1). By A. Elder Reed & Co., Ltd., 28 Monument Street, London, E.C.3. 554,588.
- "EVALGAE"; for weed and fungus destroying preparations (2). By A. E. Roberts, 70 Finsbury Pavement, London, E.C.2. 552,490.
- "COCCIDIOTON"; for veterinary and sanitary chemicals (2). By C. W. Hyland, Hyland Corner, Commissioner Street, East Johannesburg, S. Africa. 555,685.
- "SOLOZO"; for disinfectants and deodorisers (2). By H. Worrall, 45 Beaks Hill Road, King's Norton, Birmingham. 554,775.
- "SUBACINON"; for medicinal chemicals (3). By Organon Laboratories, 1 Gordon Square, London, W.C.1. 552,076.
- "GRANDMOTHER"; for laxative pills (3). By R. Drane, Ltd., 16 Queen Street, Cardiff. 552,249.
- "ELLIMAN ATHLETIC RUB" with design of tiger and athlete and words "Swift and Sure"; for embrocation (3). By Elliman Sons & Co., Ltd., Chandos Street, Slough, Bucks. 553,524. (Associated.)
- "THEOTONE"; for medicinal chemicals (3). By Allen & Hanburys, Ltd., 37 Lombard Street, London, E.C.3. 555,631.
- "DEME"; for medicated preparations (3) and for perfumery, etc. (48). By R. W. London, Masimpur, Cachar, Assam, India. 554,684/685. (Associated.)
- "NAZONE BRAND" on pyramid and strip design; for medicinal chemicals (3). By Nazone, Ltd., 142 Promenade, Blackpool. 554,801. (Associated.)
- Conventionalised monogram on oblong and round shapes; for medicines (3). By Dorothy V. H. Richardson, Carlton House, Great Queen Street, London, W.C.2. 555,142/143. (Associated.)
- "PROLUTON"; for all goods (3). By Schering-Kahlbaum A.G., Müllerstrasse 170-172, Berlin, N.65, Germany. 555,137.

A £5 Prize Winner



This display was made by Mr. F. C. Stock, chemist and druggist, 54 Otley Road, Headingley, Leeds, and won a £5 consolation prize in the recent "Daily Express" window display competition.



Marriages

KNOWLES—PEARSON.—At St. Andrew's Church, Sheffield, on December 21, Robert Barton Knowles, M.B., Ch.B., son of Mr. A. Knowles, chemist and druggist, Morecambe (formerly of Sheffield), to Kathleen Marguerita Pearson.

Deaths

GRAY.—As Heswal, Wirral, on December 18, in a road fatality, Mr. John Johnston Gray, chemist and druggist, aged seventy-three.

RUSHTON.—At Birmingham, on December 14, Harvey Thomas, dearly loved baby son of Mr. Norman Frank Rushton, M.P.S., aged five and a half months.

Personalities

MR. H. H. CANNON, M.P.S., has been appointed pharmacist at the Prince of Wales's Hospital, Plymouth, in succession to the late Mr. E. S. Wadsworth.

MR. GEOFFREY A. N. HIRST, deputy chairman and governing director of Hirst, Brooke & Hirst, Ltd., manufacturing chemists, Leeds, has been elected a Fellow of the Chemical Society. A portrait and a brief biography of Mr. Hirst appeared in our issue of January 20 (p. 58).

At Grosvenor House, Park Lane, London, W., on December 20, a presentation was made to Messrs. Scott and Black, the winners of the England to Melbourne air



MR. G. G. HAMMOND (left) MAKING THE PRESENTATION TO MESSRS. SCOTT AND BLACK

race, by Mr. G. G. Hammond, managing director of Drugs, Ltd., manufacturers of Silvikrin products. The gifts took the form of a finely moulded solid silver plaque, with two replicas in bronze.

Business Changes

HOLDSWORTH'S FOLKESTONE, LTD., have recently opened a branch at Black Bull Road, Folkestone.

MR. WILSON BARRATT, chemist and druggist, has opened a pharmacy at 136 Southdown Road, Harpenden.

Wills

MR. FRANK MIDDLETON, 148 Horn Lane, Acton, W., chemist and druggist, who died on June 18 last, left estate gross value £11,154, with net personalty £10,893.

MR. BERNARD WRAPSON LEEFE, Ripley Dale Road, Purley, Surrey, chemist and druggist, who died on June 30 last, left estate gross value £12,006, with net personalty £7,642.

MR. DAVID HARRIES EVANS, 412 Aigburth Road, Liverpool, chemist and druggist, who died July 12, aged fifty-six, left estate gross value £4,714, with net personalty £2,343.

MR. HORACE STEVENS, Wyke House, Flamborough, Yorks., pharmaceutical chemist, who died October 4 last, aged sixty-five, left estate gross value £7,218, with net personalty £7,196.

MR. WILLIAM BOLITHO TRAHAIR, 17 Thorn Park, Mannamead, Plymouth, chairman of Farley's Infant Food, Ltd., who died on September 4 last, aged seventy-nine, left estate gross value £52,990, with net personalty £47,245.

MR. HENRY WILLIAM GEORGE MORRIS, Creake House, Oxford Road, Abingdon, Berks, chemist and druggist, formerly carrying on business at Torquay, who died on June 13 last, aged seventy-one, left estate gross value £7,699, with net personalty £4,525.

MR. HILL HAMILTON BARRETT, 7 West George Street, Glasgow, and Shawfield Works, Rutherglen, chemical manufacturer, late director of John & James White, Ltd., who died on August 3 last, left personal estate in Great Britain and abroad valued at £311,264.

MR. DUNCAN MCGLASHAN, M.P.S., Kingscroft, Barn-ton, Midlothian, dentist and manufacturing chemist, founder of Duncan McGlashan, Ltd., Abdine Works, Edinburgh, who died on September 4 last, aged eighty-six, left personal estate in Great Britain valued £38,961.

SIR ERNEST BURFORD HORLICK, Bt., 27 Norfolk Street, Park Lane, W., chairman of Horlick's Malted Milk Co., Ltd., Slough, who died in Paris on October 7 last, aged fifty-four, son of Sir James Horlick, first baronet, has left estate of the gross value of £377,812, with net personalty £331,712.

MR. HORACE STOCK PHILLIPS, 38 Hesketh Road, Southport, Lancs, manufacturing chemist, a director of Roberts Patent Filling Machine Co., Deane Road, Bolton, and Phillips & Son, Ltd., chemists, Standishgate, Wigan, who died on July 9 last, aged fifty-six, left estate gross value £4,048, with net personalty £3,954.

Coming Events

This section is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc. occur.

Wednesday, January 2

South-West London Chemists' Association, Ardington Rooms, Clapham Junction. New Year's party.

Thursday, January 3

North London Pharmaceutical Association and North Metropolitan Branch of the Pharmaceutical Society, Manor House Hotel, Finsbury Park, at 7.30 p.m. New Year's dance party. Tickets, 5s. 6d. each, including supper, from Mr. Herbert Skinner, Royal Northern Hospital, N.7, or from other members of the Committee.

Telegrams :
"Atotrine
Sedist,
London."



Telephone :
Bermondsey
1141

John Bell Hills & Lucas Ltd.

"JOHN BELL BRAND"
COLD CURE CAPSULES.
For Influenza and Common Cold.

A good selling Winter line.
Send for Sample box and particulars.

Oxford Works, Tower Bridge Road, London, S.E.1

THE PRESCRIBER

A Monthly Review of Medical Science

Most useful to the progressive Pharmacist.

DECEMBER 1934—TREATMENT OF DIABETES

The latest Developments. 2s. post free.

Through any Medical Bookseller, or direct from:—

"THE PRESCRIBER" Offices, 13 Glencairn Crescent, Edinburgh, 12

"Ty-phoo" TEA (Owned by
Sumner's "Ty-phoo" Tea Ltd.
Birmingham)

is the rare "leaf-edge" tea which doctors throughout the country are now recommending to patients with whom ordinary tea disagrees.

Applications invited for sample and terms for what is claimed to be

"The best paying line in the trade"

(This Company is not connected
with any other House)

(21½% on selling price)

'DOMCO' (Regd.) MALT & COD LIVER OIL AND
MALT & HALIBUT LIVER OIL
are exceptionally palatable preparations
carrying a good profit margin

Both these quality products are supplied in 1, 2, & 7 lb. jars individually wrapped, or in 1 lb. containers for N.H.I. purposes.

Quotations from—

D. MAWDSLEY & CO. 4 & 6 Riga Street, Shudehill,
MANCHESTER

PHARMACEUTICAL FORMULAS (P.F., Vol. I). Price 15s.,
by post 15s. 9d.

PHARMACEUTICAL FORMULAS (P.F., Vol. II). Price 15s.,
by post 15s. 9d.

**TAPERED, PYRAMID, DOMED AND
FLANGE CORKS**

**COMPOSITION AND BAKELITE
STOPPERS**

THE MOST COMPETITIVE MANUFACTURERS IN
THIS COUNTRY

MUNDET CORK PRODUCTS, LTD.
12/18 ABBEY ST., TOWER BRIDGE ROAD, S.E.1

Telegrams :
MUNDETCOMP, BERM, LONDON

Telephone :
HOP 2043-4-5

90% **S. V. R.** 95%
1932
B.P.

FOR

Write for Prices **TINCTURES**

JAS. BURROUGH LTD. 1 Cale Distillery,
LAMBETH, S.E.11

OPTICAL TUITION

FOR THE

S.M.C., B.O.A. and N.A.O. DIPLOMA Examinations

Particulars:—

C. A. SCURR, F.S.M.C., F.B.O.A., F.N.A.O., F.I.O., F.C.O., M.P.S.
50 HIGH STREET, BARNET, LONDON, N.

"The Chemist and Druggist" COMPACT LIBRARY

THE ART OF DISPENSING

The tenth edition of this well-known work is now ready. The book has been thoroughly revised and considerably improved, while maintaining the features which have made it so popular with several generations of students. It is kept by chemists in the dispensary for ready reference in cases of difficulties arising in the course of the day's work. Price 8s. net, by post 8s. 6d.

VETERINARY COUNTER PRACTICE

Chemists interested in veterinary practice will find the work indispensable, as it deals with the ailments of horses, cattle, sheep, pigs, dogs, and poultry, and the remedies that can be supplied. New edition 1930 (Eighth) brings this book thoroughly up to date. Price 7s. 6d. net, by post 8s.

THE PHOTOGRAPHIC CHEMIST

This is a concise guide to chemists commencing and carrying on a photographic department. Price 3s. 6d. net, by post 3s. 8d.

WOOTTON'S CHRONICLES OF PHARMACY

In two vols., maroon cloth, comprising 770 pages, Price 10s. 6d. net, by post 11s. 3d.

THE CHEMISTS' DICTIONARY OF MEDICAL TERMS

A small book which explains the meaning of medical terms as to which customers often inquire from chemists. In addition to concise definitions of these technical terms, notes are given on the treatment of the more important ailments. Price 3s. 6d. net, by post 3s. 8d.

PRACTICAL METHODS OF URINE ANALYSIS

The object of this book is to give chemists exactly the information they want on the subject. The book was written by a pharmacist who was an expert in this work, and has been revised by a medical practitioner and lecturer of long experience in clinical analysis. (Fourth Edition). Contains 97 pages. Price 4s. net, by post 4s. 3d.

DISEASES AND REMEDIES

Now in its sixth edition (March, 1931). It has been carefully revised by an experienced medical practitioner and parts of the book have been rewritten. Price 5s. net, by post 5s. 3d.

THE C. & D. PRICE LIST FORMULARY, "P.L.F."

All users of the C. & D. Retail Dispensing Price List require a copy of this Formulary. It brings together the formulas for unofficial preparations, the prices of which are quoted in the Price List. It is a choice collection of good formulas for articles in everyday request by the public. Price 2s. 6d. post free.

Published by "The Chemist and Druggist"

28 Essex Street, LONDON, W.O.2

Branch Offices: Manchester and Sheffield, England,
Glasgow, Scotland. Melbourne and Sydney,
Australia. Auckland, New Zealand.

THE CHEMIST AND DRUGGIST

VOL. CXXI. December 29, 1934 NO. 2864

A Year of Great Expectations

THE year now ending will be remembered in official pharmaceutical circles as one that opened with great expectations: when the bells ring in its successor, there will no doubt be a feeling that many of the expectations had turned to dust, while others were tinged with the sickness of hope deferred. Many must have felt the clash of freedom with organised subservience. Compulsory membership of the Pharmaceutical Society came with the opening of 1934, and the 24,854 persons on the Registers automatically became members. The number of members recorded by the registrar for 1933 was 16,008; between 4,000 and 5,000 chemists who had previously not bowed the knee to authority hastened so rapidly to pay their new subscription as to cause a glut of guineas and half-guineas at the Bloomsbury Square establishment during January. It is true that at the end of 1934 there are a few recalcitrants who are carrying on business, defying compulsion, but the majority have paid up, many of them wondering why. Statistics of the membership for 1934 are not yet available, but something may be deduced from the comparison made in the figures for the past two years:—

	1933	1932
Membership	16,008	14,669
Pharmaceutical chemists ...	1,795	1,808
Chemists and druggists ...	23,059	22,492
Bodies corporate	1,694	1,495
Apprentices	1,667	1,410
Student-associates	752	692

Allowing for the usual annual influx, the total for 1934 will probably show a reduction of registrable membership approaching 2,000. Throughout the

THE NEW ACT BEGINS TO OPERATE wandering minstrels, singing in unison the praises of the new era and pointing out what has been gained by the new Pharmacy and Poisons

Act. The only tangible achievement during the year has been to gain extra income from those qualified and registered chemists who were persuaded that their qualification was nullified unless they paid the annual fee demanded. Towards the end of the year liveliness was expressed over the position of life members. It appeared that certain membership diplomas belonging to these members did not specify qualification, and as the Council of the Society had decided that exhibition of the certificate should declare both membership and qualification, it was decided that a replacement should be made. Apparently the Council took the view that no two certificates of membership could exist side by side. The decision could have been simply expressed without stimulating a reaction, but perhaps that was too much to be expected. One thing arose out of the controversy, namely, that no one could take away

the privilege of life membership. A year ago we called attention to the optimistic pharmaceutical view of the year 1934 as a "new dawn," and remarked that at the British Pharmaceutical Conference in London the president (Mr. John Keall) explained everything in the Pharmacy and Poisons Act. The Act came up again, however, at the Conference in Leeds last July, following a flood of Council oratory during the Spring months, and Mr. Neathercoat was brought in to explain everything once again. Some of those who were present on that occasion are still wondering what it all means. The Society's balance sheet for the year 1933 was not very pleasing: it savoured too much of the rake's progress. As we pointed out at the time, the total income was £67,390, with £758 placed to reserve out of an increased amount received of £3,552; and the cost of experimentation in journalism had mounted up to £12,606. The price paid for Martindale's "Extra Pharmacopœia" remained a jealously guarded official secret. The February Council saw the co-option of Mr. C. A. Noble to the vacancy caused by the death of Mr. John Humphrey. At the same meeting the president welcomed

COUNCIL CHANGES the nominees to the Council representing the Privy Council, Sir Humphry Rolleston, Bt., Professor J. A. Gunn and Sir Malcolm Delevingne. As the time approached for the annual Council election, there was a distinct feeling of uneasiness in the minds of the retiring members. The unknown factor was the 5,000 new voters, and there were fourteen challengers for the seven seats. At the election 9,443 effective votes were received out of 20,923 "possibles." The upshot of it was that Mr. A. A. Dick, the Scottish challenger, was returned, and Mr. L. Moreton Parry, a past-president of the Society, lost his seat till restored to the Council later in the year by co-option. The re-election of officers in June saw no change. Amended by-laws dealing with minor alterations necessary as a consequence of the Pharmacy and Poisons Act, 1933, were agreed to during the year, and received the sanction of the Privy Council, the immediate tangible result being that the Privy Council representatives were elected honorary members of the Society. In July the Council was notified by the Privy Council of the intention to bring into force the clauses of the new Act relative to the Statutory Committee; it was announced later that Sir Ernley Blackwell was appointed chairman. The Council elected Messrs. T. Guthrie, A. R. Melhuish, E. T. Neathercoat, E. S. Peck and A. Sugden as members of the Statutory Committee. At present the Committee has only functioned in setting up rules of procedure; a "penal services committee" of the Council has recently been appointed for considering complaints that may be submitted to the Statutory Committee. The Syllabus Committee of the Council reported on educational matters earlier in the year, and the Education Committee was given the business of hammering into shape the regulations and the syllabus. The time agreed upon for bringing the suggested changes into being is expiring. Articles of pupilage have been amended. Limitation of apprentices applies to institutions, but the rules for shops are built on optimistic lines, and are such that they

will need an inspectorate if they are to have any effective meaning. The question of new premises in Brunswick Square has frequently been brought forward during the year. Mr. F. Gladstone Hines, past-president of the Society, called attention in THE CHEMIST AND DRUGGIST to certain grandiose ideas, and "the Brunswick Palace" has become largely a figure of speech in consequence. Visits by a committee to buildings, with power to select an architect, have apparently begun, and a spate of oratory has supervened, among the protagonists being the president and the new treasurer (Mr. E. T. Neathercoat). The cost of the site was £57,193, and it is estimated that to fill it satisfactorily the sum of £200,000 will be required. The Pharmacy and Poisons Act, 1933, has been another important subject of discussion at association meetings, and has suggested a number of queries from our readers. Mr. G. A. Mallinson called attention, in North London, to a new feature of the National Pharmaceutical Union. Hitherto, offences against the Pharmacy Acts have not been defended by the Union; but, he said, as soon as the shop registration clauses become law, the Union will have to defend its members. Mr. Herbert Skinner, at Stoke and Norwich, laid stress upon the lack of any material benefits in the Act for chemists, and urged the necessity of regarding the Act as a first step to adequate recognition, suggesting that a prompt effort should be made to fill the vacancies left by the 1933 Act. We called attention in April to the need for co-operation rather than of compulsion. Only a new spirit of co-operation can save the Society from falling completely out of touch with its members now that compulsion is in the ascendancy. The Poisons Board set up in 1933 found its subject by no means easy. In the month of

THE POISONS BOARD August a draft of a Poisons List and Rules was sent to all interested bodies, and criticism from all quarters burst forth. Oratorical efforts and written statements rivalled each other in complicating the issue. The Pharmaceutical Council set up a special advisory committee to examine the list; grocers, hairdressers, pestologists, farmers and technical chemists vied with each other to produce amendments until, at the end of the year, the Poisons Board is snowed under: no one knows what will happen when the snow melts. Meantime, another anxiety pervaded pharmacy in the shop registration fee. It became an open secret that someone was urging the maximum fee in order to provide a sort of nucleus for the Brunswick Palace. Fortunately good sense prevailed, and the idea died prematurely without being publicly announced. In July the League of Ex-Service Pharmacists voluntarily wound itself up. The Council then set up a Public Services Committee from within its ranks with power to co-opt outsiders. The Committee has the same chairman (Mr. E. Saville Peck) but a different *personnel* and a much wider outlook. The Pharmacy League was inaugurated at the beginning of the year: two or three meetings were held, and then postponement for six months took place. During the year two additions to Part I of the Poisons Schedule under the 1908 Act were made. A death from the effect of "indis-

criminate slimming" with drugs focussed attention on dinitrophenols and dinitrocresols. The other drug was cinchophen, which was added without mention of its pharmacopœial name. The British

BRITISH
PHAR-
MACEUTICAL
CONFERENCE

at Leeds in the third week of July: the chairman was, for the second time, Dr. C. H. Hampshire. The event was a striking one, even apart from the fact of Leeds being the threshold of the most interesting moorland scenery in England. The number of papers, thirty-four, was a record, and most of them were of a very high standard. The chairman's address dealt ably with pharmacopœias and formularies, while the social side proved a most attractive feature, with the University of Leeds acting as hosts in the pharmacological laboratories, where one of the guides was Mr. A. W. Lupton, head of the Pharmacy Department. There were two delegates' meetings, one on the inevitable Pharmacy and Poisons Act, and the other addressed by Mr. H. N. Linstead on "The Society's Educational Policy," a theme for talk until members grow old and tired. The excursions were to York, Harrogate and Ilkley, through the best parts of Yorkshire. The sports day was made memorable owing to the fourth test match between England and Australia beginning on that day, and over 200 pharmacist visitors, through the interest of Sir Stanley Jackson, were able to enjoy the opening day. At the closing session, Dr. F. W. Crossley-Holland was elected the new chairman of Conference, and Mr. T. Edward Lescher the new treasurer; the venue chosen for next year was Belfast. The discussions in the Phar-

PHAR-
MACEUTICAL
SOCIETY OF
IRELAND

maceutical Society of Ireland have provided considerable interest. At the Council meeting in January came up the question of registered druggists, the query being whether a registered druggist is "qualified" to carry on the wholesale manufacturing or compounding of poisons under the 1875 Act. A discussion on the subject arose in our columns. At the end of April an additional Poisons Order was made in connection with phenol: "and such of its homologues as do not contain more than nine carbon atoms and all preparations and admixtures of phenol and such homologues, except tooth pastes, tooth powders and solid soaps for washing" were added to the Poisons Schedule. In June a good consolidation was made in the administration of dispensary districts by a Statutory Rule and Order, which set out the qualifications and duties of compounders, with other matters. Employment in pharmacy was the cause of an interesting meeting in Dublin to rationalise apprenticeship and wage levels. On the retirement of Mr. P. J. Fielding, of Cork, from the presidency of the Society, Mr. D. Warwick was elected president. An interpretation of the law with reference to poisonous vegetable alkaloids was sought over a compound tablet containing a salt of ephedrine, and the Court held that such a tablet came within Part I of the Schedule. In November, a new duty of 50 per cent. *ad valorem* was imposed by the Executive Council on toilet goods. During the year several illustrations of Irish pharmacies have appeared in

our pages. In January the Pharmaceutical Society of Northern Ireland broke new ground by holding their monthly meeting in Londonderry, the president, Mr. John Maxwell, being a resident of that city; in November, on his retirement from the presidency, there was again a visit to Derry to present him with a badge. The new president of the Northern Society, elected in October, was Mr. Fred Storey, this making his second period of office. Mr. Storey had given the invitation to the British Pharmaceutical Conference to visit Belfast and was appointed chairman of the Local Executive Committee. Mr. Horatio Todd, the first president of the Northern Ireland Pharmaceutical Society and afterwards treasurer, did not again seek election in October. An interesting question in the North of Ireland has been the control of apprenticeship. The Ulster Retail Drug Trade Association, of which Mr. James Dundee was later elected president, took up a strong position, maintaining that certain proposals would lead to bureaucratic control. A *questionnaire* was issued; and apparently the problem has been settled to the general satisfaction. From

the point of view of National Health Insurance the year has been a good one—no epidemic was recorded, and apart from the two first months of the year, sickness was fairly well under control. This should make it possible to avoid any discount of chemists' accounts. In the final distribution of the chemists' funds from 1933 there was 1.32 per cent. deduction from dispensing fees, owing to the heavy call on the fund for January and February 1933, when a mild epidemic prevailed. This was additional to the 10 per cent. economy cut on fees. The final distribution of the drug fund showed total amount of fund £2,059,706, and the chemists' accounts were £2,076,308, leaving a deficit of £16,602. The ingredient costs were £943,546, and dispensing fees £1,132,762. The Scottish Drug Accounts Committee, in their annual report, showed a wider and more interesting analysis. The Bureau, under Mr. A. B. Gilmour, was described in an article in our Special Issue of June 30. The total value of accounts in Scotland was £157,952, giving an average cost per person of 22.15d. The insulin figures are separate, the value being £9,822; and the economy cut was 6.3 per cent. of the chemists' accounts. The Ophthalmic Benefit Joint Committee agreed upon a scale of prices affecting chemists who undertake ophthalmic work under N.H.I. benefit. Modifications in the regulations were made to give greater clarity to the definition of splints and similar things on the border-line affecting fractures. It was agreed between the Ministry and the National Pharmaceutical Union that the 1934 British Pharmaceutical Codex should operate as from April 1, 1935. There has been

an exchange of views over public medical schemes, the recurrent idea being that people do not seek medical advice sufficiently early in the prevention of serious ailments or that, when ailments have arisen, they are unable to get helpful advice sufficiently early to avert serious

consequences. The National Health Insurance undoubtedly showed the rational method of protection in spite of drawbacks. Medicine and pharmacy can only be effective if they truly co-operate. Looking back through the year, it is surprising how frequently, for the most part, this subject of medical schemes, with medicine thrown in, has prevailed. It should not be beyond the wit of the British Medical Association and the National Pharmaceutical Union to devise a plan for the welfare of the community. Croydon, Brighton, and several other centres have tentatively (or definitely) put forward proposals; but unless doctors and chemists can come to agreement the rapidly growing Hospital Savings Association will displace both and make secure a public health service by means of public institutions. A serious position arose in the photographic trade in October, due to a decision of the Federated Photographic Manufacturers to withdraw, on January 1, 1935, the present Joint Council regulations with regard to the opening of new accounts. In subsequent announcements the manufacturers assured the dealers of their good will, and declared that their selling policies would be unchanged. At the present time most branches of the Photographic Dealers' Association are negotiating with the manufacturers.

Probably the most striking *C. & D.* OUR SPECIAL feature during the year has been FEATURES the series of articles on "Display for the Chemist." There were in all seven displays covering nearly sixty pages on tinted art paper, illustrating every feature in a chemist's business, with hints on how to develop sales on original and striking lines, lighting, showcases, meeting store trading, developing the toilet trade and the photographic trade as well as other features of the business of a chemist and druggist. The Annual Special Issue reached the high standard of former years, illustrating *Medicine Through the Ages*, *Side-Lights on English Pharmacy, 1550-1650*, an *Arabic Medical Manuscript*, and *Notes on a Thirteenth-Century Translation of one of Galen's Works*. Another novel feature was a camera tour through Leeds, illustrating the pharmaceutical industry of that city, together with an intimate article on Scotland's Central Checking Bureau. The retail side was catered for by hints on the preparation and application of remedies for insect bites, while technical chemicals, analytical reagents and research chemicals received special attention. The year has been marked by an unusual number of important articles specially contributed. Mr. William Kirkby, M.Sc., opened the year with an illuminating article on "The Evolution of a Profession," outlining sixty years of development in pharmacy. Mr. H. Stanley Redgrove, B.Sc., had a helpful article on hair creams, comparing the old style with the new as shown by modern emulsifiers like triethanolamine stearate. Mr. Redgrove also wrote on soapless shampoos. An article on resorcinol in chemical analysis, by Mr. Alan H. Ware, Ph.C., of Exeter, presented a novel line of thought. Mr. Ernest J. Parry, B.Sc., critically examined the monographs on oils, resins and resinous bodies contained in the *Swiss Pharmacopoeia*. Dr. S. Judd Lewis had a critical spectroscopical analysis of the mineral constituents of certain drugs. The

appeal to spectroscopy he had made clear at the 1933 British Pharmaceutical Conference in London. Triethanolamine has received considerable attention by authors of formulas. The romance of ambergris, with some striking illustrations, appeared in March; Mr. A. C. Stirling gave the romance and Mr. W. A. Poucher the practical application of ambergris. In the same month Mr. W. Forster, Ph.C., Seaham Harbour, had a thoroughly practical paper, giving the analysis of and hints on ammoniated quinine and how to avoid the loss of ammonia. Many years' working of the Food and Drugs Act provided Mr. W. Johnston, Ph.C., late of the Chemists' Defence Association, with a theme at Birkenhead, a subject dear to his heart. Dispensing difficulties were dealt with by Mrs. Skinner, who contributed helpfully in solving some of the problems due to insufficient medical training in prescribing. At Liverpool Mr. R. R. Bennett brought forward results of vitamin research as well as biological and biochemical investigation. Mr. Thomas Maben critically analysed the use of insulin and its distribution. Mr. E. J. Parry dealt with the report of the Departmental Committee on standards for foodstuffs, and insisted that a clearer objective was necessary. The romance of perfumes was interestingly outlined by Mr. W. B. Conyngham in Dublin. Shopkeeping without shops was dealt with editorially in June, and several correspondents took up the subject, Mr. T. Edward Lescher speaking on a similar question at the Liverpool Chamber of Commerce. The Codex Revision Committee issued booklets on their work on similar lines to the Pharmacopœia Commission. Advertising and effective publicity was dealt with several times from February onwards, and excellent ideas were put forward from several sources. The National Pharmaceutical Union proposals for a national advertising campaign failed to obtain sufficient support, but the Union, using some *C. & D.* propaganda, made good progress. Co-operative advertising may yet be an effective help to chemists if the Union persists. Mr. Doubleday gave some interesting information on permanent waving and setting solutions. Mr. T. Hynes explained co-operative trading in relation to income tax and "Death Duties and the Chemist" was another subject expounded. A Christmas gifts coloured section appeared in the *C. & D.* in September, and received a cordial welcome. "An Objective for Pharmacy,"

an editorial article, evoked a remarkable number of letters and congratulations on our efforts to secure pharmacy for the pharmacist: pharmacists should keep the movement going. Control of proprietary medicines on old-fashioned lines was urged by the Royal College of Surgeons apropos of the present medicines Bill which is still *in nubibus*. Interesting communications have been published on scarlet fever and by Dr. E. G. Bryant on cosmetics. The Editor of THE CHEMIST AND DRUGGIST shed new light on colour photography at the opening winter meeting of the National Association of Women Pharmacists. The British Association, under the presidency of Sir James Jeans, was a great success at Aberdeen; the president's address was on "The New World Picture of Modern Physics."

Another item of pharmaceutical interest was the institution of playing-fields at the Hertfordshire village of Little Wymondley in commemoration of the memory of an excellent pharmacist, Mr. F. W. Fletcher. Our Educational Number again epitomised for the year the present position of educational requirements in pharmacy and allied sciences. The British Industries Fair in February was a great success, and the details we set out facilitated the visits of chemists to this national institution. "Pharmaceutical Formulas," Vol. 2, received during the year numerous commendations from prominent pharmacists, including Messrs. Judd Lewis, W. Mair, W. Kirkby, E. C. Cripps, E. J. Parry, J. Wicliffe Peck, and Thomas Maben. An Anglo-German agreement was reached on trading facilities. Some interesting businesses were illustrated, notably an old Yorkshire pharmacy at Richmond, the shops of Blain & Sons at Bolton, Lancs, McGuffie of Liverpool, Forster & Co. of Dover and an old Scottish pharmacy, that of Smith & Govan, St. Andrews. In law there

LEGAL MATTERS

have been a few interesting cases. The first was a reserved judgment given on a definition of ginger wine.

An appeal was taken to the House of Lords against a judgment affirming that the phrase "yeast tablets, a substitute for Yeast Vite" was not an infringement of rights. The Pharmaceutical Society's Council slipped badly at the Bow County Court in January by an arbitrary interpretation of a sign advertising "chemists' sundries"; the action was dismissed with costs. A Medicine Stamp Acts appeal resulted in an important decision. In the first instance it was held by a magistrate that the duty of stamping was on the first vendor, and that as, in this case, the first vendor was exempt from stamping the medicine, the exemption also covered the second vendor, who was not entitled to sell a destamped medicine under Section 2 of the 1812 Act. On appeal this judgment was reversed. Lysol cases in Edinburgh in November were brought in consequence of the appearance of the word "solution" in small letters under "British Lysol" and without the name and address of the seller. The sheriff found the cases proved against all the defendants. Early in January parliamentary

interest in the price of insulin was shown. On several subsequent occasions questions were repeated,

and in June the import duty was withdrawn and insulin was placed on the free list. A Bill was put forward by ten members to control the sale of methylated spirits; it combined several of the bad features of the poisons regulations to govern sales. In an editorial article we examined the proposals, pointed out certain confused ideas in the mind of the draughtsman and exposed several fallacies. During the second reading Sir Ernest Graham-Little, M.D., quoted some of our remarks in opposition: the Bill was talked out. Questions on medicine-stamp duty have arisen regarding destamping. The Medical and Surgical (Appliances) Bill was circulated as a confidential document. It differed from the 1931 Bill and represented an effort towards agreement; pharmaceutical interests were represented by Messrs. Linstead and Kenning-

ham. The budget gave a better showing than at any period since the National Government came into existence. The economic position was decidedly better; there was a surplus of £30,000,000. Some concessions were to be expected; one was income tax (a sixpenny decrease) and another related to motor-car licences. An interesting point was the insurance economy cut; from July 1, the ten per cent. sacrifice was reduced to five per cent. Customs duties were slightly reshuffled in the effort to stimulate trade.

The service of supplying commercial notes and information throughout the year was continued, and proved once more to be a helpful feature. In foreign trade there was some improvement, but there is still a lot of leeway to make up. Indian business does not advance satisfactorily; the exports of chemicals and medicines from the United Kingdom fell to 51.6 per cent. against 54.8 per cent. in 1931-32, which in turn compared unfavourably with 1913-14, when the percentage was 74.7 per cent. South African statistics showed that imports of British chemicals had risen from 47.1 per cent. in 1930 to 58.6 per cent. (last available figures). In the Egyptian chemical trade France maintains a leading position, with the United Kingdom a good second, the proportion being about 3:2. A Canadian Order-in-Council in May set out an entry of various chemicals and medicinals in common use as a British preferential tariff. The imports of chemicals into Canada showed the U.S.A. 44 per cent., U.K. 31 per cent., France 14 per cent. The Canadian chemical industry production for 1933 showed a drop from the previous year of approximately \$3,000,000. It was reported, however, that the use of home-produced industrial chemicals was increasing. Medicinal preparations had come under a critical examination with more stringent regulations from the Department of National Health to protect the public from misleading claims. An interview with the High Commissioner for New Zealand in London turned on increased preference for British chemicals; out of 449 items 105 had been amended. The grand prize for window show during Pharmacy Week in the U.S.A. was accorded to a reproduction of John Bell & Co.'s laboratory—as set out in a photogravure inset which appeared in our annual Special Issue of June 24, 1933. In the New Year's honours list Sir Richard Glazebrook, D.Sc., received the K.C.V.O., and Mr. C. Coles, principal of Cardiff Technical College, received the O.B.E. In the birthday list we noticed that Major R. G. Archibald, C.M.G., D.S.O., M.D., director of the Wellcome Tropical Research Laboratory in Sudan received a knighthood; the same honour came to Dr. Comyns Berkeley of Middlesex Hospital, Dr. W. H. Moberly (Vice-Chancellor of Manchester University), Professor G. Elliot Smith (University College). In the elections to Mayoralty Miss Alice Gilliatt, Ph.C., of Fulham, who is well known in pharmaceutical circles, was the first woman pharmacist to be elected as Mayor. The obituary for 1934 is

rather longer than usual: John Henry Nidd, who was a prominent Manchester pharmacist; Harold Wyatt, J.P., Ph.C., once an examiner and known in many lands as an original thinker in pharmacy; E. H.

Gane of New York City, Bell scholar in 1891 and for some time on the staff of the *C. & D.*; James Leslie, who was believed to be the oldest licentiate of the Pharmaceutical Society of Ireland; Dr. George Coull, Ph.C., of Raimes Clark & Co., Ltd., a member of the North British Executive and one of the best-known pharmacists in his day in Scotland; Sir Donald MacAlister, Bt., president of the General Medical Council 1904-31 and known to pharmacists in connection with the British Pharmacopœia; H. S. Collins, works manager to The British Drug Houses, Ltd.; H. S. Phillips of Wigan, known for his services at the inception of the first National Insurance Act; Sir Max Muspratt, Bt. (Imperial Chemical Industries, Ltd.), who was closely associated with Liverpool; W. G. Whiffen, F.I.C., chairman of Whiffen & Sons, Ltd.; A. J. Preston, a pharmacist who was Dean of the London Refraction Hospital; Andrew Farrington, for a long period a member of the Pharmaceutical Society of Ireland's Council; S. Scruton, senior partner of Raimes & Co., York; François Coty, a remarkable man who founded the house of Coty; G. E. Brown, F.I.C., editor of the "British Journal of Photography"; Sir Ernest Horlick, Bt., chairman of Horlick's Malted Milk Co., Ltd.; Vivian Lindsay Hatrick (J. L. Hatrick & Co., Ltd.); George David Beggs, a past-president of the Irish Society; Dr. J. A. Walsh, also a past-president of the same Society; Miss Sewell of the Medical Hall, Killarney; W. Wyatt, Ph.C., a frequent contributor to our pages; A. L. Bruce of Aberdeen; L. A. E. Kirkpatrick of Plaistow; C. Coutts Michie of Kentish Town; C. F. Thackray, Leeds, who built up a big business in surgical instruments; and Arthur H. Jenkin, treasurer of the Pharmaceutical Society and known as one of the unselfish band of workers who helped to build the modern Society.

Liquor Arsenicalis, B.P., 1932

A CORRESPONDENT has put to us the inquiry whether it is permissible to add chloroform to liquor arsenicalis, B.P., 1932, as a preservative. The answer to such a question must necessarily be decided in the courts. The question whether the addition of preservatives to this preparation is necessary may, however, be discussed. Soon after the publication of the British Pharmacopœia, 1932, complaints were made in various quarters that liquor arsenicalis prepared according to the new formula rapidly developed moulds. The subject created some interest, but it soon became evident that experience with this preparation was not uniform and that many pharmacists experienced no trouble whatever with the new preparation. The subject was fully discussed at the London Conference in 1933, following an account of some experiments made on this preparation by Miss Smelt, then working in the Pharmaceutical Society's laboratories as research assistant to the Pharmacopœia Commission. The statements made in this discussion confirmed the variable incidence of the difficulty. Recent inquiries reveal that the trouble with the growth of moulds in this preparation is not now commonly met with. The origin of the deterioration appears to be principally the use of contaminated distilled water, but the straw used in packing bottles may be a source of contamination during manufacture and packing. It is now possible to say that if fresh distilled water taken from a still which is kept reasonably clean is used, and if ordinary care and cleanliness are used in manufacture, liquor arsenicalis will keep perfectly well and the addition of a preservative is unnecessary.

The Working of the Food and Drugs Acts

BEFORE the Birkenhead and Wirral Pharmacists' Association, recently, under the chairmanship of Mr. F. Snow (president), Mr. William Johnston, Ph.C., delivered the second portion of his address on the working of the Food and Drugs Acts. (The first portion was delivered in March and reported in the *C. & D.*, March 24, p. 330).

The lecturer mentioned an instance of a sweet spirit of nitre summons being dismissed on account of a defective certificate, the analyst omitting to add, "no decomposition had occurred which would interfere with the analysis." Among C.D.A. cases in 1902 were oil of peach kernel instead of almond oil and boric ointment weak in boric acid. Other cases included two of methylated soap liniment, the summonses being dismissed in each case with costs. A member's acetum scillæ was said to be weak in acetic acid. The summonses were dismissed and an appeal followed. It was ruled by the Court of Appeal that the B.P. of that date contained no standard for acetic acid in the final product, and the appeal failed. It should be noted that the 1932 B.P. had limits in this respect. There were many mercury ointment prosecutions in 1903. All the defendants were fined. So also was a Bland's pill vendor.

The first summons for lead and arsenic in cream of tartar occurred in 1904, and many others have followed. In the lecturer's opinion this class of prosecution has been greatly overdone. About this time another analyst's mistake in drawing up his certificate in connection with a camphorated oil case was dealt with in court. The solicitor to the C.D.A., the late Mr. C. H. Kirby, objected to the certificate as it did not state the nature of the alleged adulterant. He also said he had a complete answer to the summons, whereupon the prosecution withdrew it.

In a Midland health resort they had a carbonate of ammonia case when a member was charged with selling a drug deficient in ammonia. The defence was that, in the quantity purchased (3 or 4 oz.), it could not be wanted for medicine but was for cleaning or cake-raising. It was proved to the satisfaction of the Bench that the weaker or effloresced portions of "lump ammonia" are actually better than the solid, bright portions for cake-making, while there was no difference worth complaining about in cleaning power. The summons was dismissed on the ground that the article as sold was not a drug. Mr. (afterwards Sir) William Glyn-Jones conducted the defence, and his witnesses included Mr. Wootton, a former Editor of *THE CHEMIST AND DRUGGIST*. Mr. Johnston stressed the importance of using the clear portions of the lumps in dispensing ammonium carbonate in mixtures.

A Point not yet Decided

There were a few cases of a more special character in 1907, one being gentian powder adulterated with ground olive stones. The C.D.A. contended that gentian powder was never used for any purpose but horse and cattle medicine and that, judging by certain expressions in the Act, veterinary medicines were not included. The magistrates found against them and imposed a conviction. They did not appeal, as there were features of the case which made it unsuitable as a test. The point was still undecided. A juniper oil case of an intriguing character took place in this year. The public analyst said it was adulterated with oil of turpentine. Somerset House said it complied with the B.P. requirements, and the public analyst replied that the B.P. tests were out of date. Ultimately a committee was appointed by the Society of Public Analysts and the Pharmaceutical Society to investigate. They decided to ask the General Medical Council to alter the tests in the next B.P.

An interesting case they had to defend in 1908 was one of camphorated oil made with synthetic camphor.

After a defence on warranty the summons was withdrawn. Synthetic camphor was now official.

Referring to a 1909 prosecution for lime water, Mr. Johnston gave advice on the making and storage of this product, and remarked that he was glad to see that one of his suggestions had been included in the new B.P., viz., to shake the calcium hydroxide and water together repeatedly. The 1914 B.P. only said "Shake." In 1911, there were the usual drugs before the Courts and one or two others. Among the latter was Gregory's powder.

There were few cases in 1912, and in only two instances were these out of the ordinary run. One was in relation to iodine ointment, which was alleged to be deficient in iodine, but the C.D.A. analyst (Mr. Tickle) showed that the full percentage had been put in but that part of it had combined with the lard and did not show as free iodine. The summons was dismissed. Several chlorinated lime cases were also brought before the courts, the defence being that, though the chemical was in the B.P. for manufacturing purposes, it was never sold to the public as a drug, and that "on the merits" the article sold was efficient for the purposes for which the public bought it.

In 1914 the proportion of C.D.A. successes was very good. There were two grey powder cases. A London chemist sold 2-gr. powders mixed with sugar of milk to give bulk. The Association satisfied the magistrate that there was no fraud and that it was trade custom to give extra bulk. In an Irish case there was contamination with mercuric compounds (0.3 per cent.). These, the speaker remarked, are produced by oxidation—sometimes by the method of mixing and always by old age.

Dispensing Tested

The post-war years 1919-22 were comparatively barren years, but in 1923-24 there were fifteen camphorated oil cases and so forth before the Courts, and a large number of dispensed mixtures. Six of the fifteen summonses referred to were dismissed or withdrawn, and twelve out of twenty-six for mixtures. Much credit was due to Mr. G. A. Mallinson (who had taken over the secretaryship) for the skilful way in which he handled this unpleasant situation. Now, by arrangement between the N.P.U. and the Ministry of Health, N.H.I. dispensing errors are dealt with by the N.H.I. Committees.

During the next four-year period (1925-28) something like fifty Food and Drugs Acts cases passed through the hands of the C.D.A., and about a third were for alleged dispensing mistakes. Fourteen of the fifty summonses were either dismissed or withdrawn. Turpentine liniment was the subject of an extensive raid in North London. Seven members were summoned for selling the liniment made from the N.H.I. formula and neglecting to state on the label that this had been done. The Association successfully defended four of the seven cases. Following this, there was a raid on magnesia mixtures, when nine chemists were summoned for dispensing carbonate in place of oxide and each was convicted. Calomel ointment was a drug often tested in some districts. There was one out-of-the-way sample taken—infusion of senega.

About thirty Food and Drugs Acts summonses were defended by the C.D.A. in 1929-31 and ten were dismissed or withdrawn. During this period there was a ground cinnamon case in which 2.5 per cent. of sand was complained of. The summons was dismissed on warranty, but another defendant was less fortunate later. The new B.P. had fixed the reasonable standard of not more than 2 per cent. Ginger bleached with sulphur dioxide was another cause of trouble.

In 1932-33 the C.D.A. had twenty-six cases to defend. Three of the summonses were dismissed unconditionally; one was dismissed with costs to the defendant; ten were dismissed on payment of costs by defendants; three withdrawn; and in the nine remaining cases fines inflicted.

Trade Report

Where possible scales of prices of chemicals are given for bulk down to small quantities. Prices recorded for crude drugs, essential and fixed oils and coal tar products are for fair sized wholesale quantities. Qualities of chemicals, drugs, essential and fixed oils, etc., vary, and selected brands or grades would be at higher values.

28 Essex Street, W.C.2, December 27

DURING the few days of business of the past week the markets have been quiet, with a steady tone. A reduction in METHYLATED SPIRITS of one penny per gallon for all grades is notified, the lower values to operate for the first half of 1935. The Mincing Lane markets have been more or less idle, and conditions are not likely to show much change this side of the New Year. This morning the markets reopened with a quiet tone, with quoted values generally unchanged. OXALIC ACID is now re-exempted by Treasury Order to March 31, 1935.

Exchange Rates on London

The following is a list of the chief Continental and other exchange rates at the opening on Thursday morning:—

Centre	Quoted	Par	December 27	Value of the £
Amsterdam ...	Fl. to £	12.107	7.30 $\frac{3}{4}$	12/1
Berlin ...	Mks. to £	20.43	12.29	12/1
Brussels ...	Belgas to £	35	21.10	12/1
Copenhagen ...	Kr. to £	18.259	22.40	24/8
Lisbon ...	Esc. to £	110	109 $\frac{1}{2}$	19/11 $\frac{1}{2}$
Madrid ...	Ptas. to £	25.22 $\frac{1}{2}$	36 $\frac{1}{2}$	28/7
Milan ...	Lire to £	92.46	57 $\frac{1}{2}$	12/5 $\frac{1}{2}$
Montreal ...	Dol. to £	4.86 $\frac{3}{4}$	4.89 $\frac{1}{2}$	20/0 $\frac{1}{2}$
New York ...	Dol. to £	nominal	4.94 $\frac{1}{2}$	20/3 $\frac{1}{2}$
Oslo ...	Kr. to £	18.159	19.90 $\frac{1}{2}$	21/11
Paris ...	Fr. to £	124.21	74 $\frac{1}{2}$	12/0 $\frac{1}{2}$
Prague ...	Kr. to £	164.25	118 $\frac{1}{2}$	12/3 $\frac{1}{2}$
Stockholm ...	Kr. to £	18.159	19.39 $\frac{1}{2}$	21/4 $\frac{1}{2}$
Warsaw ...	Zloty to £	43.38	26 $\frac{1}{2}$	12/1 $\frac{1}{2}$
Zurich ...	Fr. to £	25.2215	15.26	12/1 $\frac{1}{2}$

Bank rate 2 per cent.

Pharmaceutical Chemicals, etc.

BUSINESS has been unimportant during the past week. The chief alteration in values is a reduction in methylated spirits.

ASPIRIN.—Quite a good inquiry; values unchanged: home trade, ten cwt., 2s. 7d.; five cwt., 2s. 8d.; one cwt., 2s. 8 $\frac{1}{2}$ d.; 28 lb., 2s. 9d.; 14 lb., 2s. 10d.; 7 lb., 3s.; 4 lb., 3s. 2d.; 1 lb., 3s. 4d. per lb. Bulk packing free, net, carriage paid. Contracts: Over twelve months, minimum, one ton; over six months, less than one ton.

ASPIRIN (TABLETS).—The wholesale scale of prices is as follows: Under 5,000, 3s. per 1,000; 5,000, 2s. 11d.; 10,000, 2s. 10d.; 25,000, 2s. 9d.; 50,000, 2s. 8d.; 75,000, 2s. 7d.; 100,000, 2s. 6d.; 250,000, 2s. 5d.; 500,000, 2s. 4d.; 1,000,000, 2s. 3d.; 2,000,000 and over, 2s. 2d. per thousand tablets. For over one million a rebate of 1d. per 1,000 on 10 million tablets over 12 months. Wholesale distributors' prices for smaller quantities would be dearer.

BARBITONE.—Shows no change; spot business moving: to arrive, two cwt., 13s. 5d.; 56 lb., 13s. 9d.; less, 14s. 1d. per lb., f.o.b. Continent. Spot, two cwt., 15s. 1 $\frac{1}{2}$ d.; 56 lb., 15s. 6d.; smaller parcels, 15s. 9d. to 16s. per lb.

BENZOIC ACID (B.P.).—Market is steady; average business: quantities, ex works, 1s. 9 $\frac{1}{2}$ d.; spot parcels, 1s. 10d. to 2s. 2d. per lb., ex store, as to quantity.

BENZONAPHTHOL.—Occasional inquiry for small parcels: spot, about 3s. 3d. per lb.

BISMUTH SALTS.—Makers' prices unchanged; meeting with competition. Carbonate, not less than one cwt., 6s. 6d.; less than 8 lb., 8s. 6d. per lb.

BROMIDES.—Makers' and dealers' quoted prices are unchanged; limited inquiry: ammonium, not less than five cwt., 1s. 9d.; one cwt., 1s. 10d.; 28 lb., 2s. 1d.; smaller quantities, 2s. 5d. per lb.; potassium B.P. crystals and granular, not less than five cwt., 1s. 6d.; one cwt., 1s. 7d.; 28 lb., 1s. 10d.; smaller quantities, 2s. 2d. per lb.; sodium B.P., not less than five cwt., 1s. 8d.; one cwt., 1s. 9d.; 28 lb., 2s.; smaller quantities, 2s. 4d. per lb., without engagement. Special prices for larger quantities.

BUTYL CHLORAL HYDRATE.—Very little inquiry: spot, 14 lb., 8s.; 7 lb., 8s. 3d.; 1 lb., 8s. 6d. per lb., in 1-lb. bottles.

CAFFEINE.—Values for Continental show no further change. Pure, two cwt., 6s. 9d.; one cwt., 6s. 11d.; 56 lb., 7s. 1d.; less

than 56 lb., 7s. 3d. per lb. Citrate, two cwt., 5s. 7 $\frac{1}{2}$ d.; one cwt., 5s. 8 $\frac{1}{2}$ d.; 56 lb., 5s. 9 $\frac{1}{2}$ d.; less than 56 lb., 5s. 10 $\frac{1}{2}$ d. per lb., net, carriage paid on minimum 56-lb. lots. Packages, from 5 lb., and upwards, free. British: pure, 56 lb., 7s. 9d.; less, 8s. per lb. Citrate, 56 lb., 5s. 3d.; less, 5s. 6d. per lb.

CHLORAL HYDRATE.—British makers' prices: duty-paid crystals, in 14-lb. free containers, five cwt., 3s. 1d.; one cwt., 3s. 2d.; 28 lb., 3s. 3d.; 14 lb., 3s. 4 $\frac{1}{2}$ d. per lb.; 28-lb. jars, one penny per lb. extra.

CITRIC ACID (B.P. CRYSTALS).—Makers' quoted price continues at 11 $\frac{1}{2}$ d. per lb., less 5 per cent. discount, nominal and without engagement. Dealers' prices for imported material are competitive. Market very steady but quiet.

CREAM OF TARTAR (B.P.).—British material, 99 to 100 per cent., is quoted steadily at 82s. per cwt., less 2 $\frac{1}{2}$ per cent. discount, nominal and without engagement. Dealers are offering imported material at keen prices.

EMETINE.—Makers' prices are as follows: hydrochloride, 8 oz. or $\frac{1}{4}$ kilo., 37s. 6d. per oz.; one oz. or 25 grams, 39s. 6d.; smaller quantities, 42s. per oz.; other salts are quoted in proportion.

GUAIACOL.—Liquid: less than two cwt., in 28-lb. demijohns, 9s. 2 $\frac{1}{2}$ d.; in 7-lb. bottles, 9s. 5d. per lb. Crystals are quoted as follows: less than two cwt., in 28-lb. jars, 9s. 8d.; in 7-lb. bottles, 9s. 10 $\frac{1}{2}$ d.; in 1-lb. bottles, 10s. 3 $\frac{1}{2}$ d. per lb.

GUAIACOL CARBONATE.—Market dull; quoted unchanged. Two cwt., 9s. 8d.; one cwt., 9s. 9d.; 28 lb., 10s.; smaller parcels, up to 10s. 4 $\frac{1}{2}$ d. per lb.

METHYLATED SPIRITS.—Methylators advise a reduction of one penny per gallon, to operate from January 1 to June 30, 1935:—

	In One Delivery		Industrial Methylated Spirits		Pryidinised Industrial Methylated Spirits		Mineralised Methylated Spirits (Coloured Violet)	
	61 o.p.	64 o.p.	Per gall.	Per gall.	Per gall.	Per gall.	Per gall.	Per gall.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
500 gallons and upwards	1 5	1 6	1 7	1 8	—	—	—	—
100 gallons and under 500	1 6	1 7	1 8	1 9	2 6	2 7	2 6	2 7
30 gallons and under 100	1 8	1 9	1 10	1 11	2 8	2 9	2 8	2 9
10 gallons and under 30	1 10	1 11	2 0	2 1	2 10	2 11	2 10	2 11
5 gallons and under 10	2 0	2 1	2 2	2 3	3 0	3 1	3 0	3 1

Methylated resin finish, 2d. and methylated shellac finish, 4d. per gallon extra over the prices quoted for pyridinised industrial methylated spirits. Industrial spirits (toilet quality) 2d. per gallon above the prices quoted for industrial methylated spirits. Industrial methylated spirits of 66 o.p., 68 o.p. and 74 o.p., 1d., 2d. and 4d. per gallon respectively over the prices quoted for 64 o.p., carriage paid, also on returned empty packages. Terms, cash one month, less 2 $\frac{1}{2}$ per cent. Packages charged, but allowed for at same price when actually returned, carriage forward, in good condition.

PHENACETIN.—Market is unchanged, with little inquiry this week. Quantities, crystals or powder, 2s. 7 $\frac{1}{2}$ d. to 2s. 9d.; smaller parcels, 2s. 9 $\frac{1}{2}$ d. to 3s. per lb.

PHENAZONE.—Market dull but fairly steady: crystals, five cwt., 10s. 7 $\frac{1}{2}$ d.; two cwt., 10s. 10d.; and less, up to 11s. 6d. per lb.; with powder 2 $\frac{1}{2}$ d. per lb. extra.

PHENOLPHTHALEIN.—Still but little inquiry; some cutting noted: two cwt., 2s. 9d.; one cwt., 2s. 10d.; 28 lb., 3s.; 14 lb., 3s. 1d.; 7 lb., 3s. 2d.; smaller parcels, up to 3s. 6d. per lb.

PHENYL ETHYL BARBITURIC.—Occasional spot business, with quotations in the region of 28s. to 29s. per lb., in 2-lb. bottles.

PILOCARPINE.—Convention prices: Nitrate, 175 oz. and over, 8s. 8d.; 35 oz., 9s. 1d.; 4 oz., 9s. 6d.; less than 4 oz., 9s. 11d. per oz. Hydrochloride, 175 oz. and over, 10s.; 35 oz., 10s. 5d.; 4 oz., 10s. 10d.; less than 4 oz., 11s. 3d. per oz., ex store, London.

PIPERAZINE.—Dealers' prices for Continental material: 22 lb., 52s. 11d.; 11 lb., 54s. 5d.; 2 lb., 55s. 11d.; less than 2 lb., 57s. 5d. per lb., ex store, London, 8 oz. bottles free, smaller packing extra.

QUININE SULPHATE.—Prices are steady. Sulphate, 2s. 1d.; bisulphate, 2s. 1d.; ethyl carbonate, 2s. 8½d.; salicylate, 2s. 9½d.; phosphate, 3s. 2½d.; hydrochloride, 2s. 7½d.; bihydrochloride, 2s. 10½d.; hydrobromide, 2s. 7½d.; bihydrobromide, 2s. 10½d.; valerianate, 3s. 7d.; hypophosphite, 3s. 10½d.; alkaloid, 2s. 11d. per oz., carriage paid on bulk quantities.

TARTARIC ACID (B.P. CRYSTALS).—British makers are quoting unchanged at 1s. 0½d. per lb., less 5 per cent. discount, nominal and without engagement. Dealers' prices for foreign material are competitive.

Crude Drugs, etc.

BURDOCK ROOT.—Dealers are offering spot supplies at about 57s. 6d. per cwt.

CAMPHOR.—Market is unchanged and quiet: spot, slabs, 2s. 1d.; flowers, 2s. 1½d.; tablets, 2s. 5d.; shipment, slabs, 1s. 9½d.; flowers, 1s. 10d.; tablets, 2s. 1d. per lb., c.i.f. English refined is still unchanged: flowers, one cwt., 3s. 1d.; 28 lb., 3s. 2d.; small lots, 3s. 3d. per lb. Transparent tablets, 4 oz., 8 oz. and 16 oz., 3s. 4d.; 1 oz. and 2 oz., 3s. 5d.; ½ oz. and ¾ oz. and 1 oz., 3s. 6d. per lb.; special prices for contracts for quantities.

CANTHARIDES.—A little inquiry for small spot lots. Russian, 6s. 9d. to 7s.; Chinese, 3s. 4½d. to 3s. 6d. per lb., as to quantity.

COD-LIVER OIL.—Market is quoted unchanged. Finest Lofoten steam-refined non-freezing medicinal oil is firm and now quoted at 91s. per barrel, c.i.f. London. Spot, in small lots, 130s. per barrel, ex store, duty paid. Newfoundland, non-freezing medicinal oil, 130s. per barrel, ex store. British non-freezing medicinal oil continues to be quoted from one source at 115s. per barrel, c.i.f. London, duty free, while quotations from another home source are at higher figures.

DERRIS ROOT.—Fully steady; fair inquiry. Spot, 20 per cent. ether extract, 1s. 1d. per lb.; shipment, 9½d. to 1s. 2d. per lb., c.i.f., as to test.

DIGITALIS LEAVES.—Holders of duty-paid goods are asking up to 105s. per cwt.

ERGOT.—Practically no demand on spot. Spanish, 1s. 6½d.; shipment, 1s. 4½d. per lb., c.i.f. Portuguese, 1s. 5½d. Russian, about 1s. 4d. per lb.

GINGER.—Values are steadier, but business is slow. West African, spot, 35s.; for arrival, 28s. per cwt., c.i.f.

GUM ACACIA.—Market is quite steady at the recent improvement, inquiry being received: spot, Kordofan cleaned sorts, 36s. 6d.; bleached, 67s. 6d. to 70s. per cwt.; shipment, new crop, January-February, 34s. 6d. per cwt., c.i.f.

HONEY.—Market has remained on the quiet side and values are easy as quoted. Jamaican, 32s. to 47s. 6d., as to quality. Canadian white set, 48s.; San Domingo, amber, about 31s. Californian, white clover, 43s. to 45s. Chilean dark, 26s. 6d., in bond. Mexican, darkish, 25s. 6d. per cwt., in bond.

HYDRASTIS.—Fair business; market steady. Spot, 5s. 3d. to 5s. 4½d.; shipment, 4s. 7½d. per lb., c.i.f., for bulk lots.

IPCACUANHA.—Business on limited scale, with Matto Grosso steady on spot at 5s. per lb. Minas, about 4s. 3d. per lb.

MENTHOL.—Market has been dull; a little inquiry continues for afloat. K/S brands, spot, 12s. 2d.; in bond, 11s. 1d.; afloat, 11s. 1d.; shipment, October-December, 11s. 1d.; January-March, 11s. 1d. per lb., c.i.f. sellers. Japanese shippers quoting about 11s. 3d. per lb., c.i.f.

MERCURY.—The shipment quotation for Spanish-Italian is steady at 57 dollars, f.o.b. Continent. The spot position is rather dearer and firm owing to small supplies on hand, and is quoted at £11 12s. per bottle, ex store.

SEEDS.—ANISE.—Spot, duty paid, Spanish, 67s.; Bulgarian, 40s. CARAWAY.—Dutch quoted at 35s., duty paid, and 28s. 6d., f.o.b. Holland. CORIANDER.—Morocco spot is 13s. 6d. duty paid, and 12s. 6d. in bond. For shipment, 10s. 9d., c.i.f. CUMIN.—No Malta on spot, Morocco sold at 57s. 6d., duty paid. FENUGREEK.—Tunisian offered at 14s. 6d. duty paid. Morocco is 13s. 6d., spot. MUSTARD.—English, 23s. to 32s. 6d. per cwt., according to quality.

WAX.—BEES'—Market steady. Abyssinian, spot, 102s. 6d.; shipment, 92s. per cwt., c.i.f. Benguella, spot, 105s.; in bond, 95s.; shipment, 92s., c.i.f. Conakry, spot, 102s. 6d.; shipment, 88s., c.i.f. Dar-es-Salaam, spot, 102s. 6d.; shipment, 97s., c.i.f. Madagascar, spot, 100s.; shipment, 83s. per cwt., c.i.f. CARNAUBA.—Market fully steady at recent advances, but inquiry has been slower. Fatty grey, 122s. 6d., duty paid; 110s. in bond; 107s. afloat; shipment, October-November, 107s.; December-January, 102s. 6d.; January-February, 100s.; February-March, 100s., c.i.f. Chalky grey, 120s., duty paid; shipment, January-February, 91s., c.i.f. Primeira, 240s., duty paid; 220s. in bond; shipment, January-February, 160s.; February-March, 156s. 6d., c.i.f. Mediana, 215s., duty paid; 200s. in bond; shipment, January-February, 150s. per cwt., c.i.f.

Industrial Chemicals, etc.

A FAIR inquiry for contracts for the coming year is reported. Makers' prices for alkali products continue generally unchanged for 1935. Potassium carbonate is slightly easier. Oxalic acid is firm, with the imported material becoming liable to key industry duty on March 31 next. ACETIC ACID.—Market steady; fair business: 80 per cent. technical, £38 5s.; 80 per cent. pure, £39 5s. per ton, in barrels; glacial, pharmaceutical, 90 to 100 per cent., £58, in glass demijohns; glacial, in barrels, £48 per ton, carriage paid in U.K. ACETONE, B. G. S.—Rather quieter; market unchanged: £65 to £68 per ton, in drums, carriage paid in U.K.; less for large quantities. AMMONIA (ANHYDROUS).—Steady business in small lots: 99.95 per cent. material, 1s. to 1s. 2d. per lb., in loaned drums, carriage paid, and less for important contracts. AMMONIUM CHLORIDE.—Limited inquiry; market competitive: grey galvanising, £17 10s. per ton, in casks, ex store; slightly less for contracts. ARSENIC.—Small business; keen prices quoted: Continental, £16 per ton, c.i.f. London; Australian, £15 to £17 per ton, as to quantity. Japanese, £14 15s. to £15 10s. per ton, c.i.f. for quantities. BLEACHING POWDER.—Makers' price for home trade, in minimum 4-ton lots, 35 to 37 per cent. chlorine, £8 12s. 6d. per ton, in softwood casks, carriage paid. BORAX.—Commercial granulated, £14 10s.; crystals, £15 10s.; powdered, £16; extra fine powder, £17; B.P. crystals, £23 10s.; powdered, £24; extra fine, £25 per ton, in free 1-cwt. bags, carriage paid in Great Britain; makers' quoted prices unchanged. BORIC ACID.—Commercial granulated, £25 10s.; crystals, £26 10s.; powdered, £27 10s.; extra fine, £29 10s.; large flakes, £38; B.P. crystals, £34 10s.; powdered, £35 10s.; extra finely powdered, £37 10s. per ton, for 1-ton lots and upwards, in free 1-cwt. bags, carriage paid in Great Britain; makers' prices unchanged. FORMALDEHYDE.—A steady business on a keen market: 40 per cent. by volume, £23 to £24 per ton, in casks, ex store; slightly lower prices for big quantities. ISOPROPYL ALCOHOL.—British material is steady at £5 12s. per cwt., in drums, ex works. LEAD ACETATE.—Steadier; moderate business: brown, £31 10s.; white, £34 10s. per ton, in casks, ex store. LITHOPONE.—A competitive market; limited business: 30 per cent. red seal, £16 7s. 6d. to £17 per ton, ex store, as to quantity. OXALIC ACID.—After issuing the list of re-exempted key industry products for 1935, from which this article was omitted, the Treasury have now re-exempted it up to March 31, 1935. POTASH, CAUSTIC (88 to 92 PER CENT. SOLID).—Dealers' prices are about steady at £35 5s. to £36 10s. per ton in drums, as to quantity. POTASSIUM CARBONATE.—Tends to be slightly easier: 90 to 92 per cent., £27 5s. to £28 per ton; 96 to 98 per cent., £29 to £29 10s. per ton, in casks, ex store; lower prices for contracts. POTASSIUM CHLORATE.—Dealers quoting ton lots at about £36 10s., ex store; smaller parcels, 4½d. to 5½d. per lb., ex store. POTASSIUM PERMANGANATE.—Dealers' prices steady; fair demand: commercial quality, in two-cwt. drums, 9½d. to 10d. per lb., ex store. POTASSIUM PRUSSIAN.—Business is slow; market steady: yellow, £74 10s. to £77 per ton, as to quantity, ex store. RED LEAD.—Convention prices show no further change: English, 5-10 cwt., £25; 10 cwt.-1 ton, £24 15s.; 1-2 tons, £24 10s.; 2-5 tons, £24; 5-20 tons, £23 10s.; 20-100 tons, £23; over 100 tons, £22 10s. per ton, less 2½ per cent., carriage paid; non-setting red lead, 10s. per ton dearer in each case; Continental material, £1 per ton cheaper. SAL AMMONIAC.—Fair inquiry; competitive market: dog-tooth crystals, £34 12s. 6d.; medium, £31; fine white crystals, £16 to £16 10s. per ton, in casks; slightly less for contracts. SALTCAKE.—The home trade price remains at 63s. 6d. per ton, in minimum truck lots, carriage paid. SODA, CAUSTIC.—Makers' home trade prices for 1935 will continue unchanged: 70 to 72 per cent., £13 12s.; 76 to 77 per cent., £14 per ton, carriage paid on contracts; spot, 10s. per ton extra. SODA CRYSTALS (CARBONATE).—Makers' prices for home trade unchanged for 1935: £5 to £5 5s. per ton, in bags, delivered station. SODIUM ACETATE.—Business slow; market slightly easier: £20 per ton, in casks, carriage paid. SODIUM BICARBONATE.—Home trade prices unchanged for 1935: refined, in bags, £10 10s. per ton, carriage paid. SODIUM CHLORATE.—Ton lots continue to be quoted at £32 5s., ex store. Small parcels, 4d. to 5d. per lb., as to quantity. SODIUM HYPOSULPHITE.—Market is competitive: photographic pea crystals, £14 10s. per ton, in 1-cwt. kegs, carriage paid on minimum 2-ton lots; commercial, £10 5s. per ton, in 2-cwt. bags for minimum 2-ton lots, carriage paid. SODIUM PRUSSIAN.—Limited business: quantities, 4½d. per lb.; smaller parcels, 5d. to 6d. per lb., ex store, as to quantity. WHITE LEAD.—Convention prices show no further change: dry, English, less than 5 tons, £34 10s.; 5-15 tons, £29 10s.; 15-25 tons, £29; 25-50 tons, £28 10s.; 50-200 tons, £28 per ton, less 5 per cent., carriage paid. Continental, £1 per ton cheaper. Ground in oil, English, 1-5 cwt., £44; 5-10 cwt., £42; 10 cwt.-1 ton, £41 10s.; 1-2 tons, £40 10s.; 2-5 tons, £39; 5-15 tons, £36; 15-25 tons, £34 10s.; 25-50 tons, £34; 50-100 tons, £33 10s., less 5 per cent. discount, carriage paid. Continental, £2 per ton cheaper.

Correspondence

Letters should be written on one side of the paper only. Correspondents may adopt an assumed name, but must in all cases furnish their real name and address to the Editor

P.A.T.A. Council Election : Retail Section

SIR,—Will you kindly allow me to express through your columns my sincere thanks to those who have returned me to the Council of the Proprietary Articles Trade Association? My interest in this work is unabated.—Yours very truly,

PHILIP F. ROWSELL.

Exeter.

The N.P.U. Clearing House

SIR,—The N.P.U. Clearing House for its members (*C. & D.*, December 22, p. 763) is a most useful bit of organisation; I understand that the enthusiasm on the part of those chemists who wish to avail themselves of the scheme has been gratifying. I know some retailers have as many as sixty accounts to pay monthly (I have heard of one man who had eighty on one occasion); the saving of time alone in making out one cheque in place of sixty will be considerable. Add to this the saving of 2½d. upon each account and the use of one large envelope instead of sixty smaller ones, and the boon which the N.P.U. is giving to its members will be obvious. If two dates for clearance are agreed upon by the Clearing House, and these are the 15th and the end of the month, there will be no cause for complaint on the part of either manufacturers or wholesalers. Incidentally, I believe the preliminary negotiations concerning the scheme have revealed the fact that there are close on 1,000 manufacturing and wholesale firms with pharmaceutical interests; this large number is, of course, due to the extraordinary variety of articles sold by the pharmacist.—Yours, etc.,

MANUFACTURER (24/12).

Large Doses

SIR,—Dr. A. F. Hurst, in his lecture at a London evening meeting (*C. & D.*, December 15, p. 730), referred to the comments in the B.P. on the question of dosage. In my experience the prescriber is inclined to be sarcastic at the pharmacist's expense, but if he has made a mistake he is irritated at being corrected. The worst dilemma for the pharmacist is when the doctor is not available for reference. None of these circumstances should arise; the General Medical Council has laid down the pharmacist's duty in the introduction to the B.P., and doctors should recognise that he is only performing that duty when he refers to them. But a far better method would be some uniform system of marking an overdose, so that wherever the prescription was dispensed there would be no question. Dr. Hurst said that he informed the patient. I think this is an excellent method, because it prevents any doubt or suspicion arising in the patient's mind, and there is no delay in dispensing. I have dispensed a number of scripts with a 30-gr. dose of iron and ammonium citrate, but happening to call on a brother chemist I found him in considerable doubt because it was the first one he had received and the doctor was not a local one. A lecture of this kind by an eminent physician is of immense value to pharmacists in their work and in keeping them in touch with modern prescribing.

Faithfully yours,

OVERDOSE (24/12).

Too Many Manufacturers

SIR,—Does your correspondent "Behind the Scenes" (*C. & D.*, December 15, p. 741) think that all the talent in the drug trade is with the big houses? Does he not know that in the past many of pharmacy's brightest stars had no connection with the wholesale trade? Yet the manufacturing houses readily adopted the ideas published by these workers. Surely he knows that the big houses had to have a beginning, and among the "little

fellows" there may be some that will grow big some day. He speaks of the little man reaping where he has not sown, but my experience proves that the big houses are quite expert at cribbing. "Behind the Scenes" touches many points in his interesting letter, and one might hazard a guess as to the house he is with; but in my opinion it would be all to the good if prices quoted in current lists were genuine and not inflated. I have yet to find the chemist who pays list prices, and some of the bigger houses are the worst offenders in the cutting game. "Take the order at any price" seems to be the rule, and the chemist plays one house against another; to such a pass has this cutting come that there is not a manufacturing chemist in the country that could keep open if his trade depended on galenicals alone. From experience I have proved that the average chemist does not mind from whom he buys his drugs as long as the price is keen and credit long. He will not see that by buying from the house that supplies the unqualified he is enabling that house to increase its turnover and lessening his own. At the same time, many young chemists cannot recognise good-quality galenicals when they see them; labelled "B.P." is sufficient for them. I was trained in the laboratory of one of the biggest houses, and served as an improver under a F.I.C. After qualifying I was engaged as analyst, works manager and "on the road" for different firms. Immediately after the war I started "on my own" to manufacture galenicals from first-class materials in a properly equipped laboratory and to supply qualified men only. Has the policy paid? No. I have not received the support I thought I was entitled to. My brother chemists did not like being told that they should buy their drugs from a firm that refused to supply the unqualified. They preferred to buy from whom they pleased; consequently, for the last five years I have not sought new business friends among chemists, but have devoted my efforts to producing specialities for medical men. So you see I am already doing what your correspondent suggests the older houses may do. I agree with "Behind the Scenes" that there will be a rude awakening for the chemist unless he alters his ways.

Yours faithfully,

PILGRIM (24/12).

Single and Multiple Businesses

SIR,—There is more than a trace of contemptuous cynicism in the action of a leading pharmacist in promoting a new series of chain stores—than which there is nothing more inimical to the success of the proprietors of ordinary pharmacies. It is not surprising that many members of the Society find in the present Council little evidence of an intention vigorously to assert the right of pharmacists to be the sole purveyors of all medicines—and to be regarded as a profession. It requires no argument to convince anyone concerned for real progress in pharmacy that individual responsibility is the foundation of professional status. . . . For the present it must suffice to enter a protest against this specific instance of flouting the professional aims of the Council.

Yours, etc.,

M.P.S. (19/12).

SIR,—More chain stores, and the latest of these is headed by a very august person. One again asks, "Whither pharmacy?" On the one hand is a progressive bureaucratic organisation of officials nominally running a Society for the benefit of its members; on the other, a progressive squeezing out of the individual proprietor, the backbone of the same Society, established by individual proprietor pharmacists for the economic assistance of that particular class. It's a strange world, my masters.—I am, etc.,

INDIVIDUALIST (24/12).

Illegible Prescriptions

SIR,—A coroner may generally be relied on to bring in some kind of a side-thrust at the chemist whenever possible. Our duty, of course, is to interview the doctor, whose name may perhaps only be guessed at. It is apparently no trouble whatever, and our time is of no value. I have dispensed many thousands of prescriptions, but now and then the combined staff has failed at a satisfactory elucidation of one item of importance. The telephone has been used with no result, the doctor being absent. Sometimes a personal interview has been reached after delay and the matter explained with sarcastic comments—very rarely a pleasant conversation, to say nothing of the waste of time. I remember one case which was really ludicrous. I was with a West End pharmacist, and we had a prescription one item of which floored us completely. I went along to see the prescriber, a well-known man of those days. I managed to convey to him what was wanted, and he sat down at his desk to make the correction. It was ten minutes or so before he could bring himself to the point, having meanwhile fallen asleep—which he explained by the reasonable excuse of two or three nights engaged with obstetric cases. He then roused himself sufficiently to deal with the matter, but unfortunately dipped the wrong end of the pen into the ink with results that may be imagined. I had managed to get the necessary clue to the enigma, however, and the dispensing was done in due course. Many of the panel scripts are very badly written; I call to mind one which I handed back to the patient, as I could make nothing of it, and allowed him to do the interviewing. I had no one at the time to help. I always think those Prescription Problems published from time to time in *THE CHEMIST AND DRUGGIST* deserve broadcasting. It would be a good thing to see one or two reproduced in all the papers.—Yours, etc.,
EMERITUS (27/11).

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for, and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

B. P. L. (9/8).—SANCTUARY OIL.—These samples of sanctuary oil, one fairly clear, the other full of sediment, appear to be colza oil. The trouble experienced in the burning is undoubtedly due to the comparatively large amount of mucilaginous matter in the oil, which not infrequently creates difficulty. Another cause is probably due to the very varying quality of colza oil. The best course is to obtain the oil from some reliable source where the oil is prepared for the purpose, or to allow the oil to settle for some months in airtight containers, and pour off the clear oil, filtering the remainder. Oil extracted by solvents would be much better than expressed oil.

W. R. B. (6/88).—COCAINE AND ADRENALIN SOLUTION.—Cocaine hydrochloride, according to the B.P. and B.P.C., cannot be sterilised by autoclaving or boiling because of decomposition. Adrenalin hydrochloride cannot be subjected to heating unless placed in ampoules, and then the heating should not exceed the temperature of boiling water. The liquor of the B.P. is made aseptically and chlorbutol is used as a preservative. It may be sterilised by filtration, or heated to 80° C. for an hour. Bottles and rubber caps should be sterilised by flowing steam for one hour. It is preferable to plug the bottles with cotton wool and place the rubber caps in boiled water in a porcelain dish, each separately in the steriliser. The cocaine hydrochloride solution mixed with the adrenalin solution should reasonably contain chlorbutol of the strength of 1 in 200. This should be made aseptically or/and filtered through a Seitz filter pad. If the normal saline solution and water is sterilised before use, and the bottles filled in still air with sterilised apparatus, you should experience no difficulty. The mould is propagated by spores which are most difficult to kill after

entrance to the solutions, and probably arrive through straw or dust in the laboratory. Chlorbutol does not appear to kill spores, but inhibits their growth in this strength.

A. P. W. (9/11).—DEVELOPING POWDERS FOR PAPER.—These powders are for use in the development of prints on sensitised papers. The "A" consists of sodium chloride, the major constituent (say 80 to 90 per cent.), with some sodium citrate. The "B" consists merely of crystals of sodium acetate.

E. C. C. (30/10).—BATH PREPARATION.—This is a soap of pasty consistence, enclosed in a washing glove. It consists of about 60 per cent. soda soap (dry), glycerin 27.7 per cent., water 12.3 per cent.; the ash corresponds with about 6 per cent. Na₂O. It appears to be a "cold-process" soap of the type described in Thorpe's Dictionary, Vol. VI, p. 144.

W. G. (20/10).—POULTRY POWDER FOR CHOLERA.—This is a dark maroon-coloured powder containing antimony sulphide, apparently as crocus of antimony, ferric oxide, free sulphur and magnesium sulphate; probably one-sixth of each of the first two to one-third of each of the latter two.

Subscribers' Symposium

For interchange of opinion among "C. & D." readers and brief notes on business and practical topics

Phosphoric Acid in Glassware

Phosphoric acid, especially when strong, may attack certain forms of glass, and the silica thus set free occurs in the ash of phosphatic syrups when ignited and subsequently treated with hydrochloric acid. I wonder if other workers have come across this.—Abel Scholar.

Small Salaries

Looking through the advertisements in *THE CHEMIST AND DRUGGIST* Supplement I see advertisements for qualified assistants at from £3 to £3 ros. a week, always with "Must be a reliable dispenser," or perhaps window-dresser or salesman. Is there any sense in offering such a pittance? If this is the opinion of employers of the value of the services of a qualified chemist, there must be something wrong. Why not arrange a living minimum salary equal to the real value of a qualified chemist and druggist?—M.P.S. (25/8).

Retrospect of Fifty Years Ago

Reprinted from
"The Chemist and Druggist," December 15, 1884

The Verdict of Mincing Lane

We are reluctantly obliged to acknowledge that the improved tone which business lately assumed has to a great extent disappeared, and, moreover, there is little hope of recovery at the end of the year. . . . Taken generally we do not think the fleeting year will be remembered by many as a very prosperous one, although certain articles, either through enhanced value or reduced stocks, are in a better position. . . . The Board of Trade returns for the eleven months are not encouraging, and those for November are so disappointing as to have directly influenced the stock markets upon their being published, although we are inclined to think the deficit may be compensated for shortly. . . . The Bank rate has continued unchanged at 5 per cent., and judging by the sustained demand for gold for export a prompt reduction is hardly to be expected. According to statistics, the mercantile failures of the year . . . have been far fewer than in the previous one. . . . Among the principal events of the year in the drug trade may be noticed the break up of the quinine combination with the consequent great fall in prices, and the establishment of the iodine one.

MEGGESON'S NEW PRODUCT

*SIXPENNY TINS of PASTILLES

The Best Value Available

Chemists' Quality ——— Chemists only supplied



★ The range of Pastilles packed in this style of tin comprises:—

ANTISEPTIC
BRONCHIAL
BRONCHIAL CATARRH
CATARRH
GLYCERINE
GLYCERINE and
BLACK CURRANT
GLYCERINE OF THYMOL
EUCALYPTUS OIL
LEMON JUICE, GLYCERINE
and HONEY JUJUBES
MENTHOL and EUCALYPTUS
THROAT
UNIVERSAL ANTISEPTIC

4/-

per doz. nett

MEGGESON & CO. LTD.

Established over 130 years—Experience DOES count

LONDON, S.E.16

Telephones: BERmondsey 1741 and 1742 (Private Branch Exchange)

ALKALOIDS

FINE CHEMICALS AND OPIUM DERIVATIVES

*Goods
covered by
Dangerous Drugs
Acts offered
subject to all
regulations*

Aloin • Atropine • Bismuth Salts • Caffeine • Cantharidin
Capsicin • Chloroform • Chrysarobin • Codeine • Diamorphine
Emp. Canth. Liq. • Ephedrine • Ergotin • Eserine • Ethyl-
morphine • Gingerine • Hyoscyamine • Jalap Resin • Leptandrin
Morphine • Opium • Podophyllin Resin • Salicin • Santonin
Scammony Resin • Strychnine • Veratrine and other
Pharmaceutical Chemicals and Preparations.

T. & H. SMITH LTD.

25 CHRISTOPHER STREET, LONDON, E.C.2

*Blandfield Works,
Edinburgh,
32-34 Virginia St.,
Glasgow*

Raspberry Vinegar

We are now selling supplies made from this season's fruit.

The quality of our product is fully maintained in every respect and we guarantee all deliveries

1. To be made from pure fruit juice and cane sugar without the addition of any artificial flavouring agents or preservatives.
2. To meet the requirements of The Food and Drugs Act and Pure Food Regulations.
3. To keep perfectly without fermentation or deposit.

We shall be pleased to send sample and quotation upon receipt of application stating quantity required.

J. C. ARNFIELD & SONS LTD.
MANUFACTURING CHEMISTS
STOCKPORT
ESTABLISHED 1786

STERLING - BRAND - CHEMICALS

SCALE PREPARATIONS
HYPOPHOSPHITES
BISMUTH SALTS
MERCURIALS
STEARATES
CITRATES
ACIDS
ETC.

THOS. TYRER
& CO., LTD.
STRATFORD
LONDON, E.15

E.S.T.P. (MARTINDALE)

is now being widely
prescribed for

ECZEMA AND OTHER SKIN AFFECTIONS

It is obtainable only from

W. MARTINDALE

in the following sales packages :

2 ozs. 2/6 - 4 ozs. 4/6 - 8 ozs. 7/6

W. MARTINDALE, Chemist, 12 NEW CAVENDISH STREET, W.I

SOLAZZI *The Chemist's Brand* LIQUORICE JUICE

**SOLAZZI JUICE IS GUARANTEED
TO CONSIST ENTIRELY OF THE
CONDENSED EXTRACT OF FINEST
CALABRIAN LICORICE ROOT
WITHOUT ANY ADMIXTURE WHATEVER**

Should any enquiry as to the composition of SOLAZZI be received from the public, Chemists are asked to emphasise the fact that SOLAZZI is not included in the category of Secret Remedies, and that the accompanying guarantee obtains with every parcel.

EPSOM SALTS

*Commercial and B.P. Qualities
also Powdered*

Glauber's Salt

*Commercial and B.P. Qualities
and Desiccated*

Zinc Sulphate

Commercial and B.P. Qualities

Zinc Chloride

Fused, Granulated and Liquid

**WILLIAM
BLYTHE
& CO., LTD.**

Holland Bank Chemical Works

**CHURCH
LANCASHIRE**

**Hyposulphite
of Soda** *Pea Crystals*

Lead Arsenate
Paste and Powder

**Precipitated
Sulphur
WEED KILLER**

*A list of our general Technical
Chemicals sent on application*

Give 'em Jocks!

In a hurry — nasty cough —
tickling throat — something
quick — here, try these —
finest things — only three-
pence — quick relief — quick
sale — pleased customer —
just remember



JOCKS

STOP THAT TICKLING

Definitely a line which sells quickly.
Retail 3d. a tin. Priced 2/3 per
doz. tins in attractive display
outer. Ask for sample.

HIRST, BROOKE & HIRST LTD., MFG. CHEMISTS. SHEEPSCAR WORKS, LEEDS

HALMAGON

BRAND

World-wide Registered Trade Mark

TABLETS

SAPO MOLLIS
VIRID B.P.

FOR PHARMACY & TOILET USE

We are in a specially favourable position to
quote. Prices and Samples sent on application.
Please state quantity required. Wholesale only.

BLEASDALE Ltd. MANUFACTURING CHEMISTS YORK

AN OLD-FASHIONED—BUT REALLY EFFECTIVE
remedy for **COUGHS, COLDS, IN-**
FLUENZA and **BRONCHIAL** troubles

Licoricine

ACTS LIKE MAGIC

Prices 10½d., 1s. 3d. and 3s.

MANDALL & CO. Ltd., 17/23 Stepney Rd., Newcastle-on-Tyne

TERMS

10½d. size, 8/6 per doz.
1/3 " 12/- "
3/- " 27/- "

Less 5% dis. on £6 orders.
Carriage paid on orders of
£2 and over.

A PROSPEROUS NEW YEAR

—that the coming
NEW YEAR
will prove to be a
successful and happy
one for all our
customers is the
sincere wish of

Beechams Pills
ST. HELENS, LANCs. *Ltd.*

AN INNOVATION IN**RHINO - PHARYNGEAL
THERAPY****ANAQUINTINE**
Brand
NASAL DROPSUtilising Dr. Lescene's
Drop-Counting Instillator

—ALDEHYDES, THYMOFORM, EUCALYPTOL, EPHEDRINE—

Bottle of 22cc. complete with Instillator

Retail
3/6Wholesale
31/6 per doz.Your co-operation in promptly obtaining
supplies when required will be appreciated.

Telephone : Holb. 6011. Telegrams : Ampsalvas, London

THE ANGLO-FRENCH DRUG CO., LTD.
11-12 Guilford Street, London, W.C.1**EDUCATING
THE PUBLIC**One of the most effective pieces of public
propaganda on behalf of the chemist is the
booklet**THE BUSINESS
OF A
CHEMIST AND DRUGGIST**It sets forth clearly and concisely the functions of
a pharmacist, his training, the restrictions of his
trading and other matters of especial interest to
the public at the present time.*Supplies of these booklets at the rate of***50 copies for 2/9***are obtainable from :—***THE CHEMIST AND DRUGGIST**
28 ESSEX ST., STRAND, LONDON, W.C.2**BRANCH OFFICES:**Manchester, Sheffield, Glasgow, Melbourne and Sydney
(Australia), Auckland (New Zealand).**FINEST QUALITY
CRUDE****IODINE** GUARANTEED
NOT LESS THAN
99%**EVERY CHEMICAL & INDUSTRIAL USER SHOULD
APPLY for CURRENT PRICES & CONDITIONS to****ANTONY GIBBS & SONS**

22 BISHOPSGATE, LONDON, E.C.2

representing

CORPORACIÓN de VENTAS de SALITRE y YODO de CHILE

Successors to

ASOCIACION de PRODUCTORES de YODO de CHILE**PARAFFINUM
LIQUIDUM B.P.****OLEUM**  **OLIVAE****G. E. THURLEY & SON**

UNITY WORKS

LATIMER ROADPHONE
MARYLAND 4656**LONDON, E.7**

'SAMARITAN'...THE ONE OLIVE OIL FOR CUSTOMER SATISFACTION

In its attractive wrapping, Samaritan gleams like liquid sunshine, so obviously pure and fresh. Samaritan Oil will create sales on appearance—it will keep them by reason of its delicacy of flavour due to the special choice and blending of the Spanish olives.

It is supplied in 2½, 5, 10 and 20 oz. bottles with attractive showcards.

We invite every Chemist to write for a free sample bottle and trade terms.

**THORNTON
AND ROSS LTD**

Manufacturing Chemists,
MILNSBRIDGE, HUDDERSFIELD



T.R.3

Cataplasma Kaolin (Spun)

Handsome Decorated Tins

$\frac{1}{4}$ lb., $\frac{1}{2}$ lb., 1 lb. for Retail

Also in Bulk 10 lb., 14 lb., 28 lb. tins
and $1\frac{1}{2}$ cwt. Drums

Contracts for Ton lots at Special Rates

SPUN OINTMENTS
are the best

Telephones: HOP (2422
2423
2424

ROBT. BLACKIE

Telegrams:
"Ushenspuna,
London."

Shen Works, Tower Bridge Road, London, S.E.1

PURE MALT EXTRACT

with *FINEST*

NORWEGIAN COD LIVER OIL

The Brand that does not separate nor crystallize.

Your own name and address on labels. In English jars, etc. Direct from the actual manufacturers.

THE BRITISH DIAMALT COMPANY
SAWBRIDGEWORTH - - HERTS.

London Office :

116 Church Road, Upper Norwood, S.E.19.

Phone : LIVINGSTONE 3583.

DeVilbiss

No. 29 SPRAY

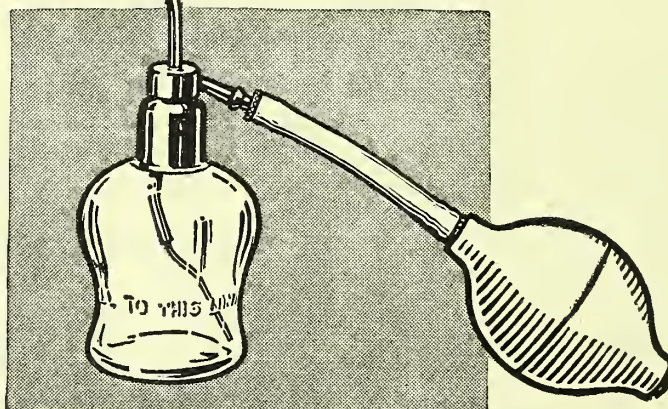
NOSE & THROAT

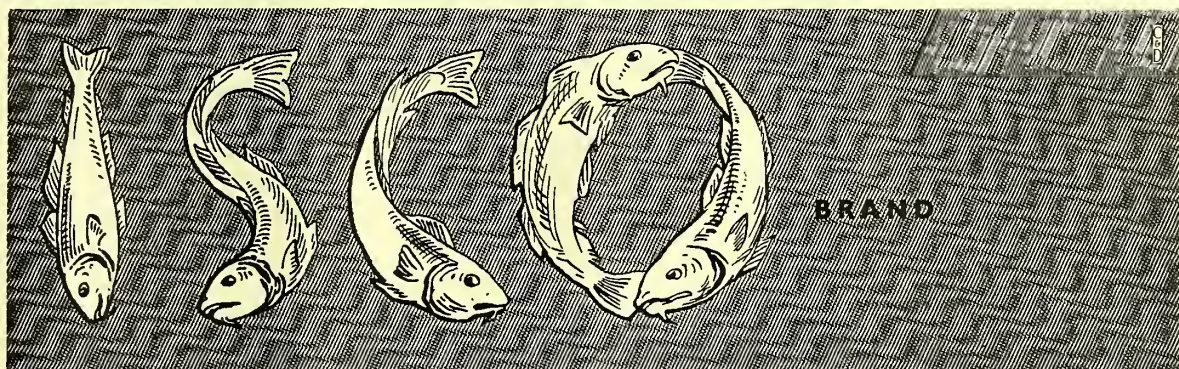
The well-known Atlas Continuous Spray No. 29 is suitable for spraying either oil or water solutions. The new fluted nasal guard is permanently fixed and is used as a tongue depressor when the throat is being sprayed.

PRICE 40/- per dozen

AEROGRAPH CO. LTD.

43 HOLBORN VIADUCT
LONDON, E.C.1





FINEST NON-FREEZING MEDICINAL COD LIVER OIL
SELECTED AND SPECIALLY GRADED—HIGH VITAMIN TEST

Buy British

BIOLOGICALLY TESTED

Samples and quotations on request

Isaac Spencer & Co. (ABERDEEN) Ltd.
ALBERT QUAY, ABERDEEN, SCOTLAND



VITAMINS A and D IN THE RIGHT PROPORTION

Scientific investigations have shown that the human body requires a minimum supply of vitamins which must not only be quantitatively adequate but which should be administered in the right proportion.

Scientists concur in the opinion that Norwegian Medicinal Cod Liver Oil contains vitamins A and D in necessary quantities and in the right proportion i.e. 500 vitamins A and at least 200 vitamins D per gram.

It is also an established fact that vitamins from a natural source, as afforded by Norwegian Medicinal Cod Liver Oil, are more beneficial in their effects than the synthetic product.

NORWEGIAN COD LIVER OIL
WORLD-FAMOUS FOR ITS HIGH QUALITY

PETROLEUM JELLIES

WHITE, LEMON, YELLOW, AMBER, RED, GREEN.

WHITE & COLOURED OILS

YELLOW, GREEN, RED FOR BRILLIANTINE, etc.

LIQUID PARAFFINCOLOURLESS, TASTELESS, ODOURLESS.
ALL SPECIFIC GRAVITIES.

B.P. AND TECHNICAL QUALITIES

*Wholesale Trade only.***STERNS LTD.**

16 FINSBURY SQ., LONDON, E.C.2, ENGLAND

Telephone: NATIONAL 7644 (7 lines)

Telegrams: "CENTUMVIR, PHONE LONDON."

*We help you to sell this
non-alcoholic Ginger Wine*

not that our help is absolutely necessary, for in thousands of cases it sells itself. New customers, however, will be attracted by the smart and telling advertising matter we send out for display purposes. This includes our latest "Savings Bank" novelty. We pay you for the window display and a generous profit is assured.

GOOD
it's
Mason's**MASON'S**
GINGER WINE ESSENCEFor full particulars write
NEWBALL & MASON, LTD., NOTTINGHAM.

SHOW AND SELL THE

"Little Victor"
BRAND**INHALER**THE PLEASANT AND RELIABLE
REMEDY FOR COLDS

FROM ALL WHOLESALERS

QUINCASCA
BRAND COMPOUND
Cold Cure Tablets**For Colds
and
Headaches****1/3 (30 Tablets), 3/- (90 Tablets)**

NOW NATIONALLY ADVERTISED

SOLD WITH THE MONEY-BACK GUARANTEE

*Ask for special "Guaranteed Sale"
Terms with Introductory Display Bonus*

Manufactured by

PEROX LTD., 12 Chenies Street, London, W.C.1



OF EVERY
DESCRIPTION

*Send us your Enquiries,
and compare our prices.*

WHOLESALE & EXPORT

C. OLLEY & SONS, LTD.
ESTABLISHED 1844

Camperdown St., and Gt. Alie St., London, E.1
Tel. No.: Royal 2868. Tel. Add.: "Circumference, Ald, London."

METALLIC CAPSULES
for all purposes

The Tonkin Metallic Capsule Co.
Proprietors: C. Olley & Sons, Ltd.

NOW BRITISH MADE

WAGNER'S DRY BOTTLE CAPS
BEST IN QUALITY & APPEARANCE



Self-Fixing

R. V. WAGNER

33 BROOKE ST., LONDON, E.C.1 Tel. Holborn 5090

STONEWARE IS SAFE

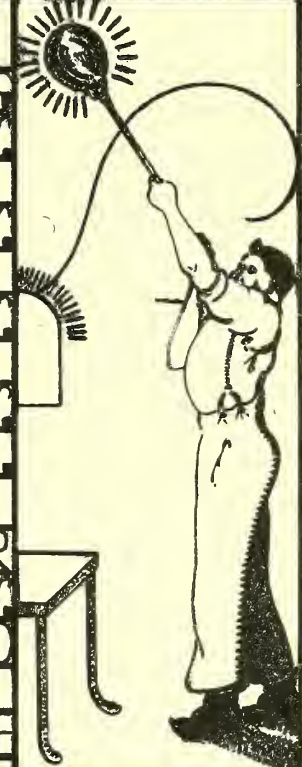
WE SHALL BE PLEASED TO
QUOTE FOR ALL CLASSES
OF CONTAINERS IN WHITE
OR ORDINARY STONEWARE
FROM HALF OZ. TO 6 GALL. IN
GUARANTEED LEADLESS GLAZE.

— SEND FOR PARTICULARS ETC. TO —

PEARSON & Co (CHESTERFIELD) LTD.
THE POTTERIES : WHITTINGTON MOOR : CHESTERFIELD
LONDON OFFICE : 31 ELY PLACE : HOLBORN CIRCUS E.C.1

PHARMACEUTICAL

W HIGHEST



DISPENSING
BOTTLES
CHEMIST
ROUND
FEEDING
BOTTLES
TOXIC
BOTTLES
EYEBATHS

SPRINKLER
BOTTLES
OPAL AND
FROSTED
GLASSWARE

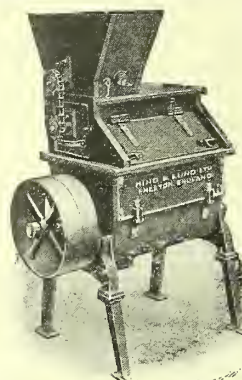
**QUALITY
GLASSWARE**

DESIGNERS & MANUFACTURERS
OF GLASSWARE FOR PERFUMES
COSMETICS AND BATH SALTS

**WOOD BROS. GLASS CO.
LIMITED**

(ESTABLISHED 1926)

BARNSELY . . . ENGLAND



SIFTERS AND MIXERS FOR EVERY PURPOSE

Sturdy well-built machines—efficient in every detail—speedy in operation, giving years of trouble-free service. You can always rely on

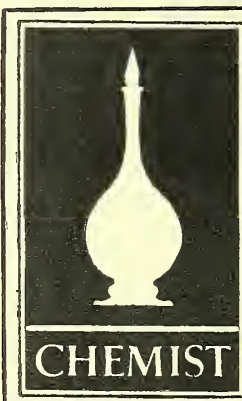
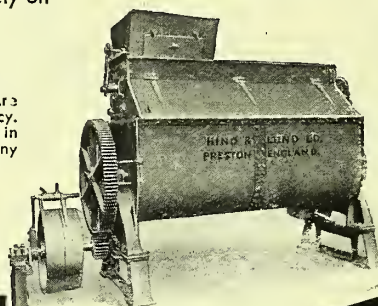
'ATLAS' SIFTERS & MIXERS

They have a world-wide reputation. Decades of experience are behind each machine. They do their job with speed & efficiency. For ease in operation, economy in running costs and time saved in cleaning they are unrivalled. We will gladly advise you on any mixing or sifting problem.

Ask us to quote you. Our prices will interest you.
Illustrated catalogue free on request.

GEO. PORTEUS & SONS (LEEDS) LTD.
LEEDS BRIDGE, LEEDS

Phone: 20529 & 20520



*Buy direct
from the Makers*

WE ARE ACTUAL MAKERS
OF ALL TYPES OF
CHEMISTS' SIGNS

Illuminated from 65/-
Non-illuminated „ 47/6

Let us quote you

SCINTILLATING SIGN SERVICE,
68a COLEBROOK ROW,
ISLINGTON, N.1
Telephone: CLERKENWELL 1310



MATTHEWS

CHEMIST SHOP FITTERS

14 & 16 MANCHESTER ST.

Established 1848

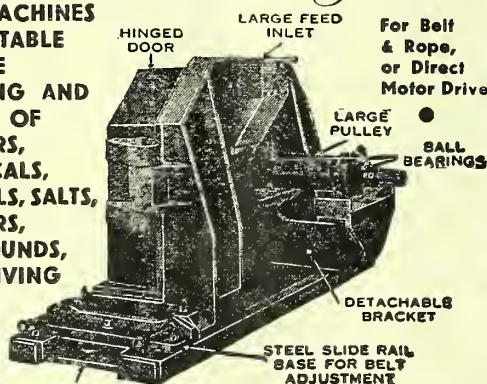
LIVERPOOL, 1

Tel.: Cent. 2695

BOOTH'S GRINDERS & MIXERS

Wizard Grinder

THESE MACHINES
ARE SUITABLE
FOR THE
GRINDING AND
MIXING OF
COLOURS,
CHEMICALS,
MINERALS, SALTS,
POWDERS,
COMPOUNDS,
ETC., GIVING
DESIRED
RESULTS
DIRECT
AT ONE
OPERATION.



WRITE
NOW

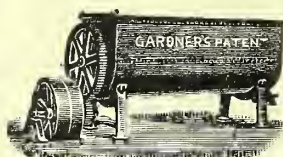
FAST & LOOSE
DRIVING PULLEYS



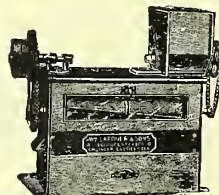
FEEDS AND
DISCHARGES
BY THE ONE
MOVABLE
CHUTE.
ABSOLUTELY
DUSTLESS.
MADE IN VAR-
IOUS SIZES

J. BOOTH & SON LTD
Congleton, Ches.

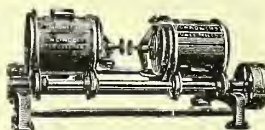
GRINDING SIFTING MIXING



Patent "Rapid" Mixer.



Patent "Rapid" Sifter.



Gardner Ball Crushing Mill.

for Chemical purposes
must be rapid, super-
fine, of laboratory ac-
curacy, and absolutely
consistent.

Gardner machines
perform all these
operations in the most
efficient way.

They are economical
and efficient; a high
standard is maintained
in the quality and
quantity of their out-
put.

Details and Catalogue of
all Gardner plants from

**WM. GARDNER
& SONS (Gloucester)
LTD.**

BRISTOL ROAD, GLOUCESTER

Telephone: 2288 (2 lines).
Telegram: "Gardner, Gloucester."
London Office: 19 Gray's Inn Chmbrs.
29 High Holborn, W.C.1.
Telephone: Chancery 7537.

SHERLEY'S DOG & CAT FOODS and MEDICINES

PREPARED BY FULLY QUALIFIED ANALYTICAL AND PHARMACEUTICAL CHEMISTS

Renowned for Purity, Safety and Efficacy

Sherley Products are extensively advertised in the National and Canine Press and are always in good demand. They will bring satisfaction to your customers and increased sales to you.



Trade Terms are generous with special discounts of 2½% for £2 parcels plus 5% for Window Display. Attractive range of Show Material Free. A postcard brings full particulars.

A. F. SHERLEY & CO., LTD., 18 MARSHALSEA RD., LONDON, S.E.1

HARVEY'S Horse Remedies

P.A.T.A.
Protected Prices.



THESE Remedies are used in most of the Training Stables, Stables of Masters of Hounds, and by many thousands of the best Private Horse Owners in the United Kingdom and Abroad.

Supplies through all Wholesale Houses.

HARVEY & CO. (DUBLIN), Ltd., DUBLIN.

LIVERPOOL SCHOOL OF PHARMACY



Principal:
H. HUMPHREYS JONES,
F.I.C., F.C.S., Ph.C.

Assisted by

John Butler, B.Sc., F.I.C., Ph.C.
W. E. Coates, B.Sc., A.I.C., M.P.S.
W. G. Cotton, M.P.S.
E. I. Greig, Ph.C.
P. H. Jones, F.I.C.
Miss A. Olive Smith, B.Sc., M.P.S.
R. A. Williams, Ph.C., M.P.S.

Preparation for the Pre. Sci.
and Qualifying Examinations of
the Pharmaceutical Society.

Full particulars from
2 BLACKBURN PLACE,
LIVERPOOL.

THE TOWN TALK

Five lines that the housewife regularly buys because of their unequalled excellence



Ten million people every month buy the newspapers and women's journals containing "Town Talk" Advertisements which tell readers the superlative qualities of "Town Talk," also that it is sold by Chemists. **That is why stockists do not have to sell "Town Talk" they are asked for it.** Order the "Town Talk" 5 quick-selling repeat-order lines. They give a generous profit. Additional "TOWN TALK" Sales Helps supplied free on request. Showcards, Window Displays, Samples, Leaflets, Cinema Slides, Blocks for own advertising.
TOWN TALK POLISH CO., MANCHESTER

You do not have to sell 'TOWN TALK.' Women BUY it.

ORDER DIRECT
OR FROM:

James Woolley Sens &
Co., Ltd., Manchester
Ayrton, Saunders & Co.,
Ltd., Liverpool
Brooks & Warburton,
Ltd.
Goodall, Backhouse & Co.,
Leeds
May, Roberts & Co.,
Ltd., London

A BIG EVENT FOR CHEMISTS— BONUS ON 'ASPRO' 5's

'ASPRO' progress continues. Again during the past financial year all sales records have been broken. In no small measure this is due to the support and co-operation given to our publicity by chemists who have made continuous and practical use of our window displays and sales aids. Economic considerations have, in the past, prevented us from giving a bonus on 'ASPRO' 5's. Increased sales, however, have considerably reduced our overheads so we are now happily in a position to satisfy the repeated requests of our chemist friends for a bonus on the Unstamped 'ASPRO' 3d. size. We therefore announce that

**A BONUS OF HALF A DOZEN PACKETS OF
5's ON EACH HALF-GROSS ORDER IS NOW
GIVEN ON THE SAME TERMS AS OTHER SIZES.**

This makes the chemists' profit on 5's the same as on 10's. Order your 'ASPRO' now and take advantage of this valuable concession.

Write us for a window display, too, and show it continuously. It will connect you up with our record-breaking advertising campaign and bring customers into your shop just as though you had paid for the advertisements yourself.

HERE IS OUR CURRENT DISPLAY

**Show it
Continuously**

**Printed in
full colours**

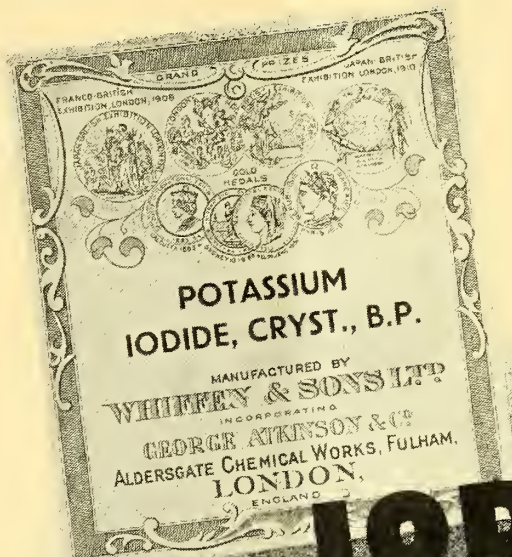


Agents:
GOLLIN & CO. PTY. LTD.
(‘Aspro’ Dept.), SLOUGH, Bucks.
Telephone: SLOUGH 608

ASPRO consists of the purest Acetylsalicylic Acid that has ever been known to Medical Science, and its claims are based on its superiority.

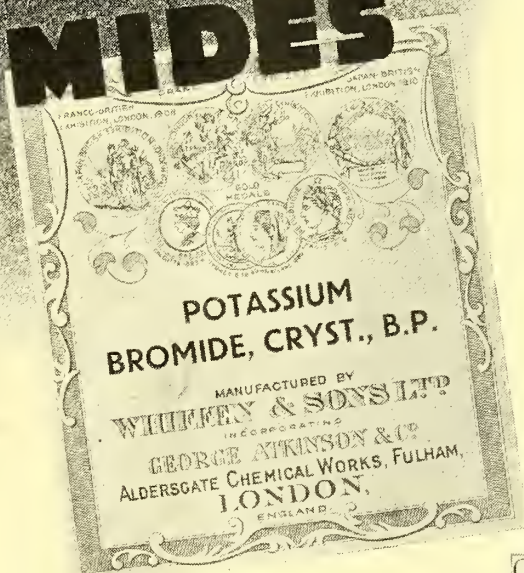
Made by ASPRO LTD., Slough, ENGLAND
No proprietary right is claimed in the method of manufacture or the formula.

ASPRO
REGISTERED TRADE MARK



ALKALOIDS AND
FINE CHEMICALS

IODIDES Whiffen BROMIDES



DRUG GRINDING
ESSENTIAL OILS
VERMILION

WHIFFEN & SONS LIMITED, FULHAM, LONDON, S.W.6

Telegrams: Whiffen London

Telephone: Fulham 0037

INCORPORATING GEORGE ATKINSON & COMPANY ★ ESTABLISHED 1654

Specialists in the
Manufacture of
Pills and Tablets
since 1839



Arthur H. Cox & Co. Ltd
Manufacturing Chemists
Brighton
England

The CHEMIST AND DRUGGIST SUPPLEMENT

This Supplement is inserted in every copy of The Chemist & Druggist

28 ESSEX STREET, LONDON, W.C.2

DECEMBER 29,
1934

ADVERTISEMENT TARIFF

ALL ADVERTISEMENTS are PREPAID, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

BUSINESSES WANTED and for **DISPOSAL, PREMISES TO LET** and **FOR SALE, PREMISES WANTED, PARTNERSHIPS, GOODS for SALE and AGENCIES**—6/- for 50 words; every additional 10 words or less, 6d. (Box No., 1/- extra.)

SITUATIONS OPEN—6/- for 40 words; every additional 10 words or less, 6d. (Box No., 1/- extra.)

SITUATIONS WANTED—2/- for 18 words; every additional 10 words or less, 6d. (Box No., 1/- extra.)

LEGAL NOTICES, TENDERS, AUCTIONS, and all specially-spaced announcements, 1/3 per nonpareil line (12 lines = 1 inch single column). (Box No., 1/- extra.)

MISCELLANEOUS (Wholesalers') Section for odd and second-hand lots—10/- for 60 words; 1/- for every additional 10 words or less. (Box No., 1/- extra.)

EXCHANGE COLUMN (for Retailers, etc.)—Twopence per word, minimum 2/- (Box No., 1/- extra.)

THE CHEMIST & DRUGGIST, 28 Essex St., Strand, London, W.C.2
Telephone: Central 6565 (8 lines). Telegrams: "Chemicus, Estrand, London."

CLOSING FOR PRESS

must reach us
not later than

FIRST POST THURSDAY MORNING

All advertisements intended for
insertion in this Supplement

ORRIDGE & CO. 56 LUDGATE HILL, E.C.4

ESTABLISHED 1846

Telephone Nos.: CITY 2283 & 7477

May be CONSULTED at their Offices on MATTERS of SALE, PURCHASE & VALUATION

We make no charge to purchasers, and invite intending buyers to communicate with us, stating their requirements

1.—**EASTERN COUNTIES**.—High-class Chemist's Business, with Wine and Spirit Licence, producing net profit of about £1,000 per annum; about one year's net profit and valuation of stock and fixtures would be entertained.

2.—**SURREY**.—Good-class Family Retail and Dispensing Business; returns for current year will be £2,200 or more; net profit £600 per annum; living accommodation, garden and garage; price for the business £1,450; the property is also for disposal, price £1,650 (£1,200 can be raised on mortgage).

3.—**FLEET STREET (NEAR)**.—Old-established City Business, returning £40-£45 weekly; scope for increase with additional capital (takings have exceeded £5,000 per annum); mahogany fixtures; good clean stock; price all-at £600 or near offer.

4.—**NORTH LONDON (DEATH VACANCY)**.—Neglected Business, offering scope for increase; present returns £20 weekly, at good prices; excellent house, with garden; held on lease; stock and fixtures worth about £550; terms, valuation of stock and fixtures, plus £200 goodwill.

5.—**BIRMINGHAM**.—Main-road Cash Retail Business for sale, owing to ill-health; returns exceed £2,000 per annum; vendor owns the property and will sell same or grant a lease at an agreed rental; in order to sell as soon as possible our client will accept any reasonable proposal.

6.—**BERKS**.—General Retail Business, with Arden's Agency; increasing turnover, present rate being £20 weekly, at good prices; comfortable house, with garden, etc.; stock and fixtures worth £550; rent £80; long lease; price £750, or valuation terms entertained.

7.—**ISLINGTON**.—Neglected Business for immediate disposal; returns 1934, £1,475; average gross profit £642; double-fronted shop in main road; rent £125 per annum; sublet £91; price about £400; no reasonable offer refused.

8.—**CROYDON (NEAR)**.—Working-class Business, producing net profit of £300 per annum; can be purchased for £625; stock and fixtures worth £350; rent £80; sublet £12s. 6d. weekly; new lease; early sale desired.

9.—**EAST COAST**.—Good-class Business occupying premier position, with seasonal trade; established 1895; returns 1933, £1,969, under management; large house; rent £100 per annum; stock and fixtures worth over £800; price £1,250, or valuation terms entertained.

10.—**LONDON, S.E.**—Cash Drug Store for disposal; returns between £15 and £18 weekly; scope for increase; living accommodation can be obtained if required; price for quick sale £300, which is less than the value of stock and fixtures; rent £78; house at present sublet for £46 16s. per annum.

1935

ANNUAL STOCKTAKING is essential in order to ascertain correct profits. Valuations have been a prominent feature with us for many years and we give special attention to this type of work. We are prepared to carry out this very necessary service, which almost becomes a task if conducted personally, at a very low price.

Write us for Terms.

BUSINESSES WANTED

We definitely require a minimum number of 12 businesses producing an annual net profit of £500 per annum or over, in the New Year. South or Midlands preferred. Plenty of capital available. Prompt action and completion with privacy guaranteed.

Chemists' Transfers, Valuations for Sale, Stocktaking & Probate

Special Terms for Income Tax Valuations and Preparation of Accounts by Qualified Accountants.

Ernest J. George & Co.

CHEMISTS VALUERS AND TRANSFER AGENTS.

Lancashire and District Representative: Mr. E. Brown, 21 Davenport Road, Hazel Grove, Stockport.

Correspondence, mutually confidential, is invited from prospective purchasers of the following businesses at present available for disposal.

(C1) MEDITERRANEAN PORT.—Old-established pharmacy, with unique features and opportunities; turnover upwards of £6,000 per annum; net profit about £1,600; price £7,500 or near offer; details will be forwarded to bona fide applicants upon receipt of bankers' references; splendid opportunity for chemist desirous of acquiring an English pharmacy abroad.

(C2) LONDON, S.E. (DEATH VACANCY).—Progressive, attractive modern pharmacy, for quick disposal; present turnover upwards of £1,500 per annum, and steadily increasing; rent £100; lease 19 years; flat available if required; reasonable purchase price.

(C3) LONDON, S.W.—Attractive modern pharmacy, unopposed, with small flat above, situated in high-class residential area; turnover for 1933-34 financial year, £2,228, and steadily increasing; excellent dispensing connection; price about £1,400, including stock and fixtures £1,000; offers considered.

(C4) LANCs.—Old-established business, situated in main shopping centre; turnover for 1933-34 financial year, £2,092, net profit £428; good N.H.I.; rent, £32 per annum; price £1,500 or near offer.

(C5) EAST COAST.—Unopposed business situated in small seaside resort; turnover approximately £1,150 per annum; net profit £350; low rental, which includes living accommodation; price £750, including stock approximately £350; open to offer.

(C6) ROMFORD (NEAR).—Prominently-situated main-road business, with excellent profit-earning capacity; net profit for last financial year upwards of £550; rent £50, including good living accommodation; scope for further development; price about £1,600; offers considered.

(C7) LIVERPOOL.—Elegantly fitted and very attractive main road pharmacy, with excellent living accommodation; present returns approximately £1,500 per annum; abundant scope for further increase; rent £80; lease 21 years or freehold could be purchased; price £1,150, constituting little more than the value of stock and fixtures; well recommended.

(C8) WEST COUNTRY.—Up-to-date pharmacy, situated in progressive seaside resort; net profit upwards of £1,500 per annum; purchase price approximately £5,500 to include stock, fixtures, lease and goodwill; valuation terms considered; initial details will be forwarded to genuine prospective purchasers upon receipt of bankers' references.

(C9) HOVE.—Established old-time pharmacy, situated in good-class residential area; present returns approximately £1,000 per annum, and

Bank Chambers, 329 High Holborn, London,
Telephone Nos.: Holborn 7406 & 7407 (2 lines) W.C.1
15 Bridge Street, Walsall Telephone: Walsall 3774

steadily increasing; high profit rental and very low overhead expenses; good reasons for disposing; price £850 or near offer.

(C10) GOLDERS GREEN.—Drug store with excellent scope for substantial development; present returns approximately £1,750 per annum; attractive well fitted lock-up shop, with flat available if required; reasonable rental; price £950 or near offer; a trial for any reasonable period will be granted.

(C11) ESSEX (SEASIDE RESORT).—Attractive main road corner pharmacy (lock-up), with excellent potentialities; present returns upwards of £1,500 per annum; particularly good scope for optics; reasonable rental; price £675 all-at, representing a most attractive offer, due to the fact that an early sale is desired.

(C12) NORFOLK.—Genuine market town business, with good living accommodation, for quick disposal; turnover (certified) for 1933-34 financial year, £1,769; returns from March to October this year amounted to £1,072; every investigation welcomed; rent £80; reasonable purchase price.

(C13) WARWICKSHIRE.—Middle-class retail and dispensing business, with living accommodation, situated in charming country town; present returns approximately £1,200 per annum; excellent scope for further development; rent £52; price £700 or offer.

(C14) MAIDA VALE.—Established business, which has not been fully exploited for some considerable time, but offers excellent scope with adequate personal attention; present returns approximately £15 per week; rent £115 per annum, including 2 flats above; good-class district; price to comprise value of stock and fixtures only; stock can be reduced if necessary.

(C15) BOURNEMOUTH.—Elegantly fitted and very attractive main-road business, with definite scope for increase; good living accommodation; present turnover approximately £1,150 per annum; price £900 all-at, representing less than the value of stock and fixtures; early inquiry advised.

(C16) BRIGHTON.—Prominently situated main-road business for quick disposal, at very reasonable figure; attractive and well-fitted shop, with living accommodation above; present returns approximately £1,100 per annum; excellent prospects for considerable further increase; low purchase price.

(C17) GLOUCESTERSHIRE.—Progressive up-to-date business, with living accommodation, including good garden; present returns upwards of £25 per week, and steadily increasing; rent and rates £52 per annum; price by negotiation.

VALUATIONS FOR ALL PURPOSES AT ECONOMICAL RATES.

BERDOE & FISH

CHEMISTS' VALUERS AND TRANSFER AGENTS,

41 Argyle Square, KING'S CROSS, W.C.1

(One minute from St. Pancras and King's Cross Stations.)

1.—ESSEX (Seaside).—Good Middle-class Business; in main shopping centre; turnover exceeds £2,600; plenty of scope; large corner pharmacy; heavily stocked; genuine reasons for selling; price £1,600, little more than value of stock and fixtures.

2.—SUSSEX COAST.—High-class Dispensing Business in splendid position; turnover £3,300; good profits; attractive Pharmacy, fully stocked; price £2,750; further details on receipt of banker's reference.

3.—THAMES VALLEY.—Good-class Business; pleasantly situated; no near opposition; turnover £1,000, increasing; good house, garage, &c.; rent £80; stock and fixtures worth about £600; price £750 or valuation terms arranged.

4.—WESTCLIFF-ON-SEA.—Sound Progressive Cash Business; present returns £27 weekly; not season trade; steadily increasing; corner position; good flat over; moderate rent; price £800, or £350, stock at valuation; recommended.

5.—KENT.—Village Business; few miles out; no opposition; returns £1,150; net profit £290; large shop, with house attached; rent £65, sublet £48; long lease; price £750.

6.—BRISTOL.—Genuine Cash Retail, with N.H.I. and Kodak Agency; returns average £900, net profit £250; scope for increase; price, including freehold premises, £1,200.

7.—WEST END.—Old-established Business, entirely under management; easy hours; returns £60 to £70 weekly; large pharmacy, well fitted and excellent stock; price £1,850, little more than valuation of stock and fixtures.

8.—HORNSEY (near).—Old-established Business, with large Panel; returns average £1,700; gross profits 38 per cent.; books audited; plenty of scope in younger hands; moderate rent; on long lease; owner retiring; price £1,500.

9.—LONDON, S.W.—Good-class Suburban Business; in growing district; returns about £1,500; modern pharmacy, with flat over; well fitted and stocked; price £850 or offer.

10.—LONDON (Western Suburb).—Well-established Light Retail, in good main-road position; returns £1,700, net profit £450; rent £75, sublet £68; spacious double-fronted shop, well stocked; leaving trade; price £1,000.

Lowest Terms for Stocktaking

Estab. 1870.

Telephone: Terminus 3574.

THE ASSOCIATION OF MANUFACTURING CHEMISTS, LIMITED

(Business Agency, Transfer & Valuation Department)

KIMBERLEY HOUSE, and at EXCHANGE CHAMBERS,
Holborn Viaduct, LONDON, E.C.1 2 Bixteth St., LIVERPOOL.

PARKIN S. BOOTH, Valuer. Tels.: CITY 3691 (4 lines).

VALUATIONS. SALES OF BUSINESSES. STOCKTAKINGS.

Enquiries Invited.

S. F. CLARK, F.N.A.A. 'Phone: Prospect 3366

CHEMISTS' VALUER & TRANSFER AGENT
34 Marksbury Avenue, Richmond, Surrey

Gives personal and confidential service in all matters of BUSINESS TRANSFER, VALUATIONS, STOCKTAKING, and MORTGAGE requirements.

Consultations arranged to suit pharmacists' convenience.

"The retail pharmacist's Counsellor."

JOHN BRIERLEY, F.N.A.A.

THE RECOGNISED CHEMISTS' VALUER & TRANSFER AGENT
135 Queen Street, Newton Heath, MANCHESTER

"A reputation behind every transaction."

"SOUND BUSINESSES WANTED."

Expert Service. - Personal Attention.
"Your Interests are mine." (Tel.: Failsforth 1913)

THE ART OF DISPENSING

Price 8s., by post 8s. 6d.

DISEASES AND REMEDIES

Price 5s. net, by post 5s. 3d.

Published by "The Chemist and Druggist"

28 Essex Street, LONDON, W.C.2

BUSINESSES FOR DISPOSAL.

CHEMIST and Druggist's Business in first-class suburb in Edinburgh for immediate sale; capital required, inclusive of shop property, about £1,500. For particulars apply in writing only to Mackenzie & Fortune, Solicitors, 40 Melville Street, Edinburgh.

COUNTRY CHEMIST'S BUSINESS FOR SALE.—Centre of nice town between Winchester and Salisbury; delightful countryside; well-fitted shop; 7 rooms; garage and large grounds; electricity installed; trade £20 weekly, increasing; rent only £52 yearly; long lease; total ingoing about £750. Coxill & Mitton, Business Transfer Specialists, 101 Old Christchurch Road, Bournemouth.

FOR immediate disposal, Stock of Bradford Drug Store; includes: Drugs, Shop Rounds, Syrup Bottles, Herbs in Bulk, Showcases, Fixtures and Drawers; no reasonable offer refused; owner declining business. Write 1/1, Office of this Paper.

APARTMENTS.

THE HAMPDEN RESIDENTIAL CLUB.

FOR GENTLEMEN, Hampden Street, N.W.1. Close to King's Cross and Euston. 300 Bedrooms, 12s. 6d. to 25s. per week, including baths, attendance and boot cleaning. All meals à la carte in dining room. Moderate tariff. Large Club Rooms, Library, Billiards Room, Reading Room and Study for Students. Illustrated Prospectus from Secretary. Euston 2244/5.

APPOINTMENTS.

BRADFORD EDUCATION COMMITTEE. TECHNICAL COLLEGE, BRADFORD.

APPPLICATIONS are invited for the appointment as Assistant Lecturer in the Department of PHARMACY in the College.

Salary according to the Burnham Award, which is from £186 to £480 per annum (less the national approved temporary deduction). Commencing salary according to qualifications and experience.

Full particulars of the appointment and forms of application may be obtained from the Director of Education, Town Hall, Bradford, and completed applications should be returned to the Principal of the College not later than January 15, 1935.

THOS. BOYCE,
Director of Education.

AGENCIES.

NORTHERN IRELAND.—Sales and Distributing Organisation has an opening for one other Agency. References exchanged. 5/6, Office of this Paper.

SITUATIONS OPEN.

RETAIL (HOME).

EALING.—Wanted, Young Lady Unqualified Assistant after Christmas; had experience in Dispensing and General Retail, including Toilets; good-class trade; must be quick and reliable. Write, stating experience, references, and salary required, 1/13, Office of this Paper.

EAST HAM DISTRICT.—Wanted, one Qualified man to take charge; one Qualified Junior; and one Unqualified man. Must have experience, be good Salesmen and Window-dressers; do not enclosed stamped envelopes, and no country applications will be considered. Write P.C.B. 146/6, Office of this Paper.

MANCHESTER DISTRICT.—Wanted, as soon as possible, Qualified Manager for small branch. Apply, stating age, experience, salary expected, and other particulars, by letter only, to W. F. Cuttifford, Pharmacist, 193 Langworthy Road, Salford 6, Lancs.

PUTNEY.—Improver required, either sex, for high-class, old-established business; hours 9—7. Write, giving full particulars re age, etc., and state where apprenticeship has been served. 4/4, Office of this Paper.

AT ONCE.—Qualified, married, small Branch Manager, to live over shop; also Qualified Assistant. Full particulars first letter; applications not answered five days regretfully declined. Foster, 14 Forest Hill Road, S.E.22. 'Phone: Syd. 1548.

JUNIOR Assistant, must be thoroughly competent, wanted early in New Year; permanency; highest wages paid. Haywards (Birmingham) Ltd., 90 Aston Road North, Birmingham 6.

LADY (M.P.S.) Assistant required for S.W. London; used to brisk Counter trade and N.H.I. Dispensing. State salary required and when free. 253/171, Office of this Paper.

MANAGER, small branch, P.O. attached; seaside; easy hours; no Sunday duty, no N.H.I. Dispensing; half-holiday; permanency to suitable man; abstainer preferred. State age, experience, references and salary required, to C. Stonelake, Smith Street, Guernsey, Channel Islands.

PART-TIME Assistant for London, S.E.14, immediately; Tuesday, Wednesday and Friday, 5.30 p.m. to 8.30 p.m.; Saturday 5.30 to 9.0 p.m.; alternate Sundays 6 p.m. to 8 p.m. State age, experience and salary required to 6/27, Office of this Paper.

QUALIFIED Assistant (lady) required; good Counterhand, Window-dresser and reliable Dispenser; able to take charge. Full particulars as to age, experience and salary required to W. K. Winfield, Solihull Pharmacy, Solihull, near Birmingham.

QUALIFIED Assistant of good appearance and address. Send full particulars to W. Brunton, 240 Earl's Court Road, S.W.5.

THE Stockport I. & E. Co-operative Society, Ltd., 27/39 Chestergate, require the services of a Qualified Chemist as Branch Manager, age 25-35, either sex; wages £5 per week; accurate Dispensing and Photographic experience essential; energetic Counterhand and Window-dresser, etc. Application by letter only, stating age, experience, together with copies of two testimonials, to reach the Society not later than first post on Friday, January 4, 1935, endorsed "Chemist."

By Order of the Committee,
S. LLOYD,
General Secretary.

UNQUALIFIED Assistant required in high-class Pharmacy in Torquay; must be quick and accurate Dispenser and good Salesman; permanency. Apply, giving age, full particulars of experience and salary required, to 253/174, Office of this Paper.

UNQUALIFIED Lady Assistant wanted at once for Counter, Stock and Booking. Hall, Chemist, Pinner, Middlesex.

WHOLESALE.

THE COUNTY PERFUMERY CO., PARK ROYAL, N.W. 10

Manufacturers of Brylcreem, are reorganizing their sales force. Vacancies exist for first class salesmen with good connections in the following territories:—S. Midlands; S. Wales; London; Scotland; W. Midlands; Lancashire and Cheshire. Remuneration by salary, expenses, and commission. Applicants must provide own car, and be able to pass Fidelity Bond.

ADVERTISING Assistant wanted by London Wholesale House for Medical and Trade Propaganda; ability to write good copy preferable to knowledge of lay-out. Write full particulars, in first letter, including age, experience, qualified or unqualified, salary required, to 253/172, Office of this Paper.

EXPERIENCED Tablet Maker required for Manufacturing Chemists in the Manchester district; must have thorough knowledge of the Production of all types of Tablets and be an Expert Coater; preference given to applicant who is accustomed to Stokes' Machines. Write, giving full details of past experience and wages expected, 252/155, Office of this Paper.

CLEAR OUT—your Old or Damaged Stock of Photo Goods.
Why keep them any longer? Turn them into CASH.
I GIVE BEST PRICES for Old Films (damaged, fogged or expired dates); Packet Papers, Cards (any sizes), Old Photo Goods or Cameras, Bromide Papers, Plates (all sizes, all makes). Send any goods in the photo line. I buy all, good or bad. Cash per return. A good price for all Cameras. Send them along.
S. E. HACKETT, 23 July Road, Liverpool

CLEAR OUT OLD STOCKS OF BOTTLES AND JARS FOR PROMPT CASH ANY QUANTITIES

Post Samples and Full Particulars to:—
W. SPEAKE, 68 Yew Tree Road, WALTON, LIVERPOOL

INVOICE TYPIST required; must have had previous experience in the trade. Apply by letter, giving full particulars and salary required, to The Secretary, Wright, Layman & Umney, Ltd., Southwark, London, S.E.1.

PHARMACIST, Manufacturing, wanted for old-established Wholesale House, with thorough knowledge making Extracts, Infusions, Ointments, Tinctures, &c., on large scale. State previous employments, experience, age, salary expected. Progressive opportunity. 253/175, Office of this Paper.

SIMPKINS Chemists' Confections may create a vacancy out of a growing London and district connection; applicants to be able to sell to Qualified Pharmacists exclusively our well-known products from own car on salary and commission; the situation amply rewards high type Salesmen who are conscientious Workers. Send copies of references and all details to A. L. Simpkin & Co., Ltd., 51 Belvedere Road, S.E.1.

TABLET Maker wanted. Apply by letter in first instance, giving full details of experience, stating age and wages expected, The Wallis Laboratory, 58 King George's Avenue, Watford.

YOUNG Man of selling ability and some Retail experience, with connection among Chemists in the Midlands and South Wales, required by London Manufacturing Chemists to work and extend existing connection; permanent and progressive position for the right man; applications treated in confidence. Write, stating age, experience, territory now covered, remuneration required and when available; must live on territory; no stamps. 253/173, Office of this Paper.

COLONIAL, INDIAN AND FOREIGN.

HOWSE & McGEORGE, LTD., Nairobi, require a Qualified Male Assistant, tall, single, under 30, of good experience and address, and with satisfactory experience Dispensing, Photographic, Counter; salary Sh.500/- per mensem; agreement, 3 years after completion of 12 months' probation; second-class passage paid out and home. Apply in first instance, with full particulars of previous experience, photograph and copies of testimonials, to Zebra, c/o 84 Fenchurch Street, London, E.C.3.

SITUATIONS WANTED.

RETAIL (HOME).

A PHARMACIST (26) desires permanency as Manager or Assistant; keen, energetic and well experienced in middle- and good-class Pharmacy, with busy Dispensing; Photographic and Window-dressing; willing worker, trustworthy. Gwyn C. Thomas, 22 High Street, Ventnor, I.O.W.

A—**QUALIFIED** Chemist (32), 8 years' London, City and West End experience; requires for the New Year a managerial post, where initiative and good work is appreciated. Apply in confidence to 253/176, Office of this Paper.

A QUALIFIED Manager, M.P.S., single, experienced in all branches, West End and London area; highest references; free shortly; quick and accurate Dispenser; good appearance, reliable. 5/7, Office of this Paper.

A QUALIFIED Manager (24) tall, seeks change; 7 years' experience Dispensing, Window-dressing, Counter, Photography (D. & P.) and Buying; keen and energetic; £4 10s. weekly. 1 Livingstone Street, Roundhay Road, Leeds 7.

A S Manager, London, experienced, Qualified; disengaged; interview. 69 Ormeley Road, Balham, S.W.12.

LIMITED LIABILITY COMPANY REGISTRATIONS

The prudent man makes his position, and that of his dependents, secure by limiting his Liability. Costs are not high if the work is placed with **THOS. WATTS & WALKER LTD.** who effect registrations North, South, East and West, and you are invited to communicate with them.

VALUABLE QUALIFIED EXPERIENCE TO DRAW UPON.
 INTERESTS OF CLIENTS ALWAYS UPPERMOST.
 ADVICE FREE AND PROMPTLY GIVEN.
 SIMPLICITY IN PROCEDURE. GUARANTEED SATISFACTION
 Address: Oxford Chambers, 9 Oxford St., Manchester, 1. 'Phone: Central 0260

A SSISTANT, referred Part II, requires situation (age 23); high-class references. Bowler, 8 Second Avenue, Bath.

A SSISTANT (6 ft.; 24 years). Unqualified; 8 years' experience in Counter trade, Dispensing, and Window-dressing; willing to go anywhere; free immediately. Fenton, Todwick Common, near Sheffield.

A SSISTANT (25), Unqualified; West End and all-round experience; good Window-dresser; London preferred. "C.", 44 Turneville Road, W.14.

D ISPENSING (Apothecaries' Hall)—Young Lady requires post; Midland district; General Dispensary experience. Llewellyn, Belmont, Chester Road, Kidderminster.

M.P.S., **MARRIED**, Senior or Branch Manager; London or suburbs; disengaged. Redman, 12 Queen Anne's Gardens, Bush Hill Park, Enfield, Middlesex.

QUALIFIED (36), experienced Manager and Assistant, requires permanency or temporary position; disengaged. "Chemist," 50 Grove Lane, London, S.E.5.

WHOLESALE.

A KEEN M.P.S. (24) seeks two or three good Agencies for Yorkshire area; commission and part expenses basis; 7 years' Retail experience (at present managing). 6/11, Office of this Paper.

A DVERTISER (35) desires position in Wholesale House, London or Midlands, as Checker or Stock-keeper; 17 years' experience; hard worker; good timekeeper; highest references; willing to take charge. 6/19, Office of this Paper.

B ELGIAN Chemist (41) requires appointment in London with good manufacturing firm; offers monopoly of specialities, Toilet Preparations and Pharmaceutical products; well-known on Continent. Further particulars from Box 030, U.K., 25 Shaftesbury Avenue, W.1.

PROPRIETARY, Medical Propaganda, Sales; own car; 30 years' exceptional recommendations; highest credentials; M.O.H. hill of health; 7 years last engagement, self-terminated; Hants and West of; permanencies and first-class houses only. "Stability," Barley Mow, Barnstable.

FOR SALE.

(Articles to the value of £5-£50.)

K ODAK VELOX (four operator) printer, without sinks, with 500-watt lamp, in perfect order, £12. F. Hallam, Ltd., Chemists, Burton-on-Trent.

MISCELLANEOUS.

CHEMISTS' FITTINGS.—We hold an immense stock of Drug Fittings, Dispensing Screens, Glass-fronted Counters, Perfumery Cases, Nests of Drawers, Wall Cases, Silent Salesmen, Upright and Flat Counter Cases, Plate Glass Counters, Cash Tills, Display Stands and Glass Shelves, &c., at competitive prices. **F. MAUND & E. BERG (SHOWCASES), LTD.**, Shop Fitters and Shop Front Builders, 175/9 Old Street, London, E.C.1.

LIMITED COMPANIES REGISTRATION.—As the older Chemists know, this small advertisement has now appeared here for over 25 years. If an experienced agent, whose terms are somewhat lower than any quotation you can get anywhere, can help you, write for free advice to A. BERNARD SLACK, 721 Princess Road, West Didbury.

SECOND-HAND Pharmacy Fittings for Sale at Keen Prices, including Modern Silent Salesmen and All-Glass Counters. Send requirements or call at **PHILIP JOSEPHS & SONS, LTD.**, 90/92 St. John Street, Clerkenwell, E.C.1. Telephone: Clerkenwell 2191. "Pharmacy Fitters for over a Century."

